ORBIT 67

A publication
of the
Ontario Institute
for Studies
in Education

Ideas
about Teaching
and Learning
Volume 14, Number 3
October 1983

OISE Conferences

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Editor: Ruth Sims
Managing Editor: Hugh Oliver
Design: Gwen Egan
Editorial Assistants: H. Berkeley & K. Corrigan

Consultant Panel: D. Ellis/B. Hayward/J. Hill/
M. Holmes/B. Kilbourn/E. L. Lafleur/
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Re-experiencing Learning:

The Teacher as Student

Jane Schisgall, *Arts Coordinator, Montgomery County Public Schools, Maryland*

Kids often think that the teacher knows it all. That's not so surprising. After many years of teaching chemistry, the multiplication tables, geography, or whatever, it is likely that the teacher *has* pretty much mastered the material. But along the way, the teacher may have forgotten how hard it was the first time around. The original frustration, confusion, and mistakes have long since faded from memory.

I recently had an experience that brought it all back. I decided to learn something completely new to me—aerobic dancing. I am not a dancer, an athlete, or even an exercise addict. However, I knew that I needed to work on my physical fitness, and aerobic dancing looked like fun. I had visions of a high kicking, if somewhat middle-aged, Rockette star as I plunked down my money for the course at our local community center.

As I entered the gym for the first class, I had an anxiety attack. All the other students looked so confident. I had forgotten to bring an exercise mat. I felt I was wearing the wrong clothes. Everyone else looked so "right." The brochure had instructed us to bring tennis shoes. I thought my old gardening sneakers would be just fine. Everyone else had on sporty running shoes with leotards to match. "Why am I doing this?" I thought, as the instructor began.

The vocabulary was all new. What did "jazz walk," "slide," and "pony" mean? Fast and furious the directions came—crazy kick, three-step turn and pivot, runner's stance—and on and on it went. I felt confused and inadequate. With only one left and one right foot, how could I always seem to be on the wrong one *all* the time? Why was I always three beats behind? Could I do this for an hour?

Just as I was about to give up, the instructor glanced at me and winked. "In a week it'll be easy," she said. "Everybody has trouble the first few sessions." "Hm," I thought, "she understands." I realized I had just re-experienced the role of the student. The teacher's reassurance that my problems were normal helped me to realize that my frustration was part of the process and not a cause for feeling inferior.

After my first semester in aerobics, I feel more relaxed about learning the new routines that are taught at each class. I have accomplished my goal of improving my physical stamina and coordination skills. More importantly, I have rediscovered important aspects about the learning process that will help me be a better teacher. I am more aware of the problems and anxieties that my students are experiencing. And I realize how important it is for me to continue to re-experience learning. However, next semester I think I'll give my body a rest. I wonder how I'd do at landscape painting! □

This experience was the first of many that I had in re-experiencing the learning process. Along the way, I rediscovered some basic ideas about teaching.

1. *The attitude of the teacher makes a significant difference.* I found that the energetic, enthusiastic teacher helped me start to work even when I didn't want to. The teacher's initiative in energizing the class helped us all.

2. *The environment influences learning.* Some classes met in a cluttered dark gym with spare athletic equipment scattered about whereas other classes met in a light, airy spacious area. I always concentrated better in the second environment.

3. *Diverse strategies help students with different learning styles.* The teacher offered the instructions verbally, she demonstrated them physically, and she offered cue words at difficult junctures. Slowly, "crazy kick" became a cue to help me focus and know the task ahead.

4. *New material needs special attention.* The teacher knew which parts were going to give trouble, and we practised these components separately and slowly before putting them in the total context.

5. *Positive reinforcement encourages students to keep trying.* The teacher praised the class's real accomplishments. She concentrated on the positive even as she helped us with our errors.

As a student, I also rediscovered several important aspects of learning. Becoming aware of these in myself has given me new empathy with my students and insight into the learning process.

1. *Learning takes a lot of practice.* I wasn't going to learn it all at once. It was going to come slowly with many mistakes along the way. I wasn't "stupid," and the teacher wasn't "bad." Learning takes time.

2. *Learning with friends bolsters self-confidence and can facilitate learning.* As I became friendly with the members of the group, I realized that they weren't going to make fun of me or think me inadequate because I made mistakes. I stopped worrying about their reactions and concentrated on the task at hand.

3. *Overload can turn the student off.* When I had too much new material thrown at me at once, I couldn't learn. Near the end of the class, I often lost my concentration; I was tired and less receptive to learning new material.

4. *Total mastery may be an unrealistic and unnecessary goal.* I realized that I wasn't going to learn it all perfectly. I had to accept the reality that I wasn't going to be a new Rockette. "But then," I reasoned, "I really came for the exercise. If I can't learn that one step, I'll just jog in place until we go on." I accepted my limitations and didn't berate myself for not being perfect.

THE SECOND INTERNATIONAL STUDY OF MATHEMATICS:

An Overview of the Ontario Grade 8 Study

Les McLean, Dennis Raphael
and Merlin Wahlstrom,
Education Evaluation Centre, OISE

What do we know about the teaching and learning of mathematics in Ontario schools? Do we know how well students are learning mathematics? Do Ontario students learn as much as students in other countries such as England, France, Japan and the United States? Do Ontario teachers make use of a variety of instructional methods in the classroom? Are instructional aids frequently employed? Is the curricula covered over the course of the year? Finally, how does the Ontario Mathematics Program itself compare to programs in other countries of the world?

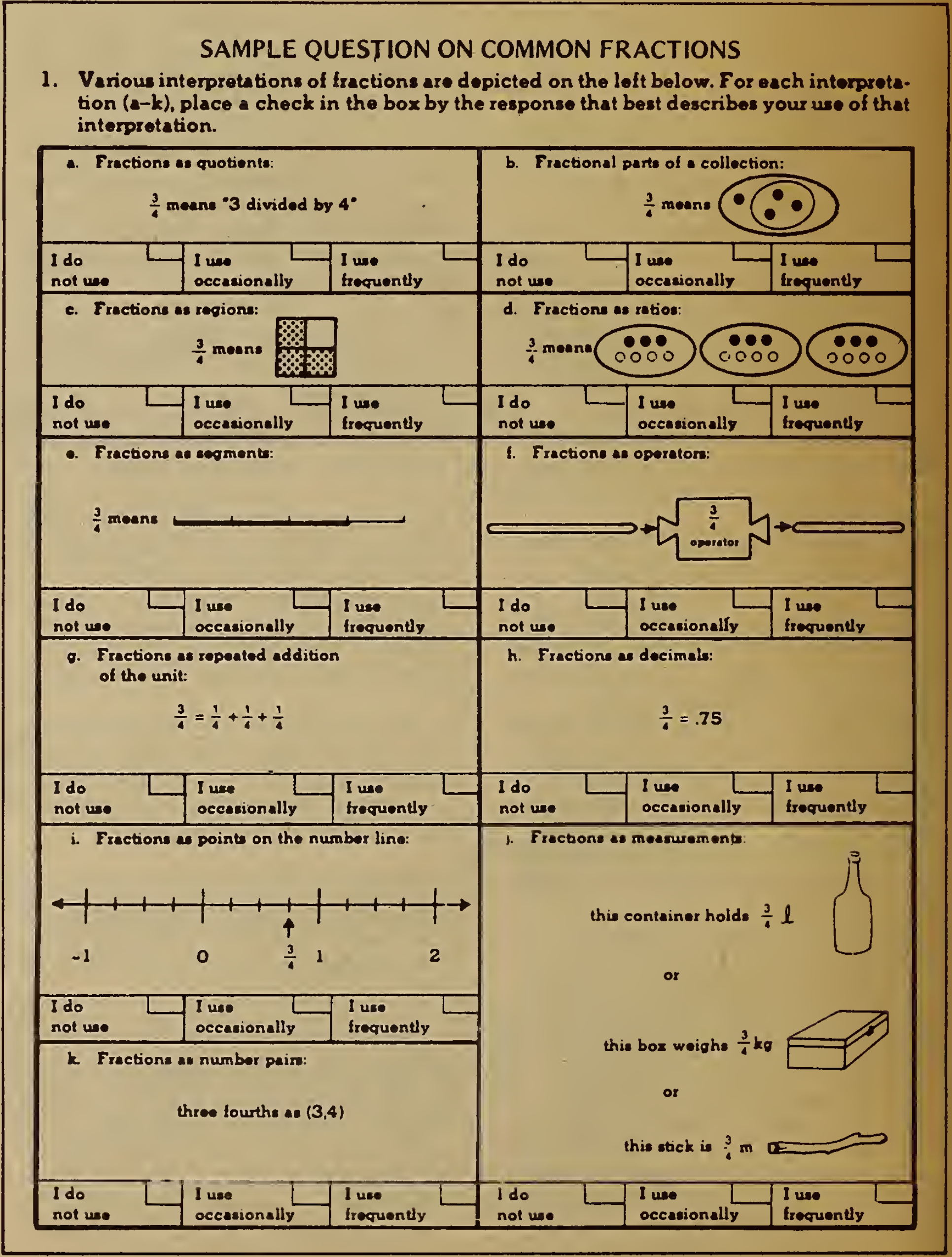
Until recently, it was difficult to examine Ontario's educational programs from an international perspective. In September 1980, however, the Ontario Ministry of Education funded Ontario's participation in the Second International Study of Mathematics (SIMS), organized by the International Association for the Evaluation of Educational Achievement (IEA). The purpose of IEA is the comparative analysis of educational programs across nations in an attempt to identify characteristics of particularly effective ones. These characteristics may range from aspects of the structure of an education system to the curricular content or instructional methods commonly used in the classroom. Once these factors related to effective learning are isolated, this knowledge can be communicated to the international education community with the aim of improving instruction.

Two provinces in Canada participated as "countries" in SIMS—Ontario and British Columbia. Scotland and England as well as French and Flemish Belgium were also regarded as countries in the study. In all, 24 countries participated.

In Ontario, SIMS was conducted by OISE's Educational Evaluation Centre (EEC). Les McLean, Head of EEC, was Principal Investigator and "National" Research Coordinator, Merl Wahlstrom and Ronald Ragsdale were Co-investigators, and Dennis Raphael was Project Manager. A Steering Committee of Ontario mathematics educators, chaired by Howard Russell of OISE's Curriculum Department helped the OISE team by assessing the validity for Ontario of the International Study measures and by suggesting additions to the International Study design.

Several thousand grade 8, 12, and 13 Ontario students, along with their teachers and school principals, contributed information on many aspects of the teaching and learning of mathematics. This information has been sent to the international coordinating centres in New Zealand and U.S.A. for inclusion in the International Reports expected in one or two years' time. The present article is an overview of the Ontario experience at the grade 8 level only. A subsequent article will summarize the Ontario grade 12/13 study.

Design of the Study and Sample Selection
Focus of SIMS was at two levels. Population A was defined internationally to be those students enrolled in the grade during which most reached 13 years of age; in Ontario, this was grade 8. Population B



SAMPLE QUESTION ON COMMON FRACTIONS

1. **Various interpretations of fractions are depicted on the left below. For each interpretation (a–k), place a check in the box by the response that best describes your use of that interpretation.**

a. Fractions as quotients: $\frac{3}{4}$ means "3 divided by 4"

I do not use ☐ I use occasionally ☐ I use frequently ☐

b. Fractional parts of a collection: $\frac{3}{4}$ means

I do not use ☐ I use occasionally ☐ I use frequently ☐

c. Fractions as regions: $\frac{3}{4}$ means

I do not use ☐ I use occasionally ☐ I use frequently ☐

d. Fractions as ratios: $\frac{3}{4}$ means

I do not use ☐ I use occasionally ☐ I use frequently ☐

e. Fractions as segments: $\frac{3}{4}$ means

I do not use ☐ I use occasionally ☐ I use frequently ☐

f. Fractions as operators:

I do not use ☐ I use occasionally ☐ I use frequently ☐

g. Fractions as repeated addition of the unit:

$\frac{3}{4} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$

I do not use ☐ I use occasionally ☐ I use frequently ☐

h. Fractions as decimals:

$\frac{3}{4} = .75$

I do not use ☐ I use occasionally ☐ I use frequently ☐

i. Fractions as points on the number line:

I do not use ☐ I use occasionally ☐ I use frequently ☐

j. Fractions as measurements:

this container holds $\frac{3}{4}$ ℓ

or

this box weighs $\frac{3}{4}$ kg

or

this stick is $\frac{3}{4}$ m

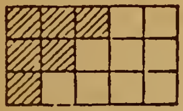
I do not use ☐ I use occasionally ☐ I use frequently ☐

k. Fractions as number pairs:

three fourths as (3,4)

I do not use ☐ I use occasionally ☐ I use frequently ☐

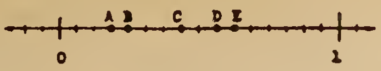
Figure 1



In the figure the little squares are all the same size and the area of the whole rectangle is equal to 1. The area of the shaded part is equal to

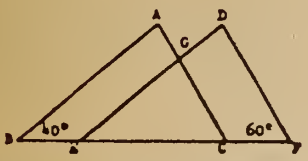
A.	$\frac{2}{15}$	D.	$\frac{3}{8}$
B.	$\frac{1}{3}$	E.	$\frac{1}{2}$
[✓ C.]	$\frac{2}{5}$		

Which of the points A, B, C, D, E on this number line corresponds to $\frac{5}{8}$?



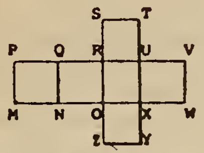
A.	point A	D.	point D
B.	point B	[✓ E.]	point E
C.	point C		

A sample of Fraction items on the core test.



In the above diagram, triangles ABC and DEF are congruent, with BC = EF. What is the measure of angle EGC?

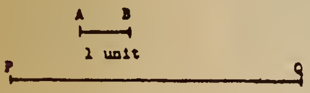
A.	20°	[✓ D.]	80°
B.	40°	E.	100°
C.	60°		



The diagram shows a cardboard cube which has been cut along some edges and folded out flat. If it is folded to again make the cube, which two corners will touch corner P?

A	corners Q and S	[✓ D]	corners T and V
B	corners T and Y	E	corners U and Y
C	corners W and Y		

A sample of Geometry items on the core test.



The length of $\overline{AB}$ is 1 unit. Which is the best estimate for the length of $\overline{PQ}$?

A 2 units

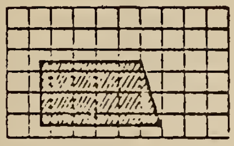
[✓ B] 6 units

C 10 units

D 14 units

E 18 units

6.



☐ 1 square unit

The area of the shaded figure, to the nearest square unit, is

A.	23 square units	[✓ D.]	15 square units
B.	20 square units	E.	12 square units
C.	18 square units		

A sample of Measurement items on the core test.

Figure 2

included students enrolled in the normal terminating year of secondary school whose programs included a significant component of mathematics; in Ontario, this was taken to include grade 12 and grade 13 students intending to specialize in mathematics.

The International Study of Mathematics had three components which were common to each national study. A curriculum analysis determined the context in which teaching and learning of mathematics took place. Prime focus was on the mathematics content expected to be conveyed to students—the *Intended Curriculum*. Documentation was also made of the educational institutions and structures of the school system, curricular goals and influences, teacher education values and practices, textbooks, and school resources. An important component was analysis and recording of retention rates and of various student characteristics. This information was provided by the research team in each country, responding to a series of questionnaires developed by the IEA international centres.

Second, teachers supplied details of their concepts of mathematics, their priorities, and their teaching methods—the *Implemented Curriculum*. Data collected included school and classroom resources, teacher characteristics (including background, beliefs, and attitudes) and instructional methods and practices, time allocations, and course content covered. An example of the types of information teachers provided is given in Figure 1—in this case, methods for teaching Common Fractions.

Finally, students answered questions to measure both their mastery of mathematics content and their attitudes toward the learning of mathematic—the *Attained Curriculum*. The Attained Curriculum was measured through achievement items developed at the international centres in such a way as to cover most of the mathematics curriculum in the participating countries. A few examples of these achievement measures are given in Figure 2. The Steering Committee found that the overwhelming majority of these items were relevant to the Ontario curriculum and were therefore valid for administration to Ontario students. The IEA item booklets and administration procedures were designed so that the majority of students would have sufficient time to attempt every question. Figure 3 summarizes the study components.

To select the study sample, schools containing grade 8 classrooms were first assigned to twenty-six strata on the basis of: (a) school size, (b) type of school (private, French, English separate, and English public), (c) rural or urban community, and (d) geographical region of the province. Five schools were then randomly

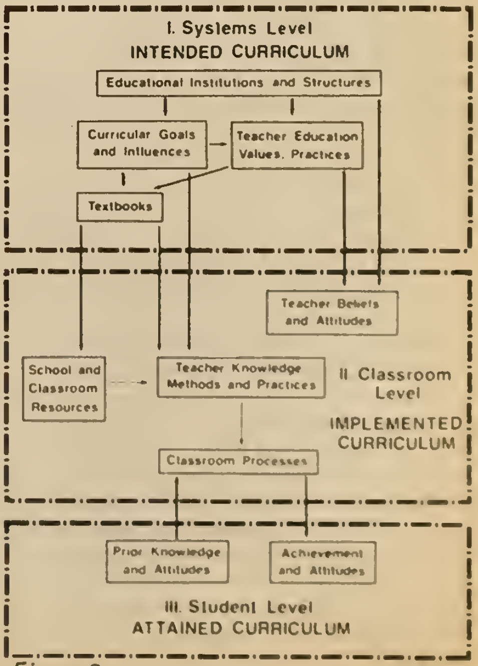

I. Systems Level
INTENDED CURRICULUM
Educational Institutions and Structures
Curricular Goals and Influences
Teacher Education Values, Practices
Textbooks
Teacher Beliefs and Attitudes
School and Classroom Resources
Teacher Knowledge Methods and Practices
II Classroom Level
IMPLEMENTED CURRICULUM
Classroom Processes
Prior Knowledge and Attitudes
Achievement and Attitudes
III. Student Level
ATTAINED CURRICULUM

Figure 3

chosen from each stratum, giving 130 schools in all. In turn, one or two classes per school were chosen, and data were collected at both the beginning and end of grade 8. Principals completed a school questionnaire at the beginning of the school year, and classroom teachers completed questionnaires over the course of the year. An additional school from each stratum was subsequently selected, and the item booklets were administered to these schools at the end-of-year only—to estimate whether the beginning-of-year administration and the numerous teacher questionnaires affected end-of-year results.

RESULTS from the Grade 8 Study
Description of student and teacher characteristics will be presented first, followed by information on the intended, the implemented, and the attained curriculum.

Student and Teacher Characteristics
Ministry of Education figures confirmed that (as required by law) virtually all (99.4 percent) of Ontario 13-year-olds were enrolled in either publicly or privately supported schools in 1978, the last year for which such data were available to the study. The Roman Catholic schools enrolled approximately 30 percent of students, while private schools accounted for 2 percent. Included within the separate schools were virtually all of the 5 percent of students enrolled in French-language schools.

Estimates of the socio-economic status of students were derived from descriptions of fathers' and mothers' occupations and were based upon a widely used Canadian measure of occupational prestige, the Pineo-Porter scale. For international analyses, the 16-point scale was reduced to a 4-point scale: 1.00 (unskilled and semi-skilled), 2.0 (skilled), 3.0 (supervisors/managers), and 4.0 (professional and managerial). The average level for private schools was 3.1, and for public, separate, and French schools was 2.4, 2.2, and 2.1 respectively. As has been observed in various studies, student achievement in mathematics was related to socioeconomic status—see Figures 4 and 5.

A total of 181 teachers returned questionnaires describing their background and general teaching activities. Females predominated (72 percent), the median age of all respondents being 36. Seventy-five percent were over 32 years of age, and 50 percent had had twelve or more years of teaching experience.

About half of these grade 8 teachers had studied no mathematics at all during their post-secondary education, and only about one-third had taken more than a single full-year course. Then, during teacher training, 30 percent reported having taken no courses in mathematics methods and pedagogy.

Nine out of ten taught subjects other than mathematics, and a similar proportion reported spending between 175 and 225 minutes a week instructing their classes in mathematics. These same teachers devoted 40-90 minutes a week outside of class to mathematics preparation and an equivalent amount of time to marking and reading papers.

The Intended Curriculum
Guidelines for Grade 8 in Ontario were recently revised. The new guidelines came formally into effect during the fall of 1981, but a draft version began circulating informally during 1976-1977. Data for SIMS were collected in Ontario during the 1981-1982 school year.

The Grade 8 Mathematics Curriculum Guidelines contain, within the strands of Numerical Methods, Algebra and Geometry, required topics of Number Applications, Fractions, Ratio, Rate, Percent, Data Graphs, Integers, Measurement, Circle, Formulae, and Equations. There is also an emphasis upon Geometric Constructions, Transformations, Plane Figures, and Three-Dimensional Geometry. Optional topics include Rational Numbers in Decimal Form, Relations, Probability, Flow Charts, and other aspects of Geometry.

Members of the Steering Committee who compared the achievement items to the Guidelines judged that over 80 percent of the items were taught either before or during grade 8.

Teacher Coverage of the Intended Curriculum—During the course of the study, teachers indicated whether topics were taught as new content or as review material, were assumed and not taught, or were neither assumed nor taught. Virtually all teachers reported that Fractions and Decimals were reviewed or taught as new content. Ratio, Proportion, and Percent were also reviewed or covered by almost all teachers, with approximately one-fifth of teachers regarding these topics as new material. Most teachers covered most of the Measurement topics.

Topics not covered by a majority of teachers were usually those not included in the Guidelines: Between-system Conversions (80 percent); Names of British Units, Surface Area of a Sphere, Volume of a Sphere, and Volume of a Core and Pyramid (75 percent). About 40 percent of teachers reported not covering Precision, Accuracy, and Error. A number of Geometry topics in the Guidelines were not covered by significant proportions of teachers. These topics included Transformations (40 percent), Pythagorean Theorem and Geometric Solids (33 percent), Similarity (20 percent), and Congruence (15 percent). Algebra topics in the Guidelines were almost all covered.

In summary, the coverage of topics by Ontario Grade 8 teachers corresponded closely to the *Intended Curriculum* for Fractions, Ratio, and Measurement. Some divergence between the *Intended* and *Implemented Curriculum* was reported in Geometry. Less than 20 percent of the content of the IEA achievement items were not covered.

The Teaching of Grade 8 Mathematics in Ontario
Teachers provided detailed information about use of instructional resources, instructional approaches, and instructional aids.

Instructional Resources—Teachers relied heavily upon the student textbook and to a lesser extent on locally produced text materials. Little use was made of individualized materials, films, filmstrips, or laboratory materials (games or manipulatives).

Instructional Approaches—Of the ten or twelve possible instructional approaches for each topic presented in the teacher questionnaires, individual teachers tended to use one or two (though not necessarily the same ones). Teachers indicated that the methods they commonly used were those suggested by the textbook. The most common reason for not using a method was non-familiarity with the approach.

Instructional Aids—Teachers relied on a very few instructional aids. For example, in the teaching of Geometry, the following materials were "used extensively": ruler and compass and protractor (about 90 percent) and graph paper (50 percent). The following materials were "not used": set squares (75 percent); geoboards (80 percent); paper cutouts and patterns, models of solids, paper folding (40 percent); tracing paper (50 percent); mirror or reflectors (60 percent); filmstrips (80 percent); computer graphics (almost all); and solid object kits (90 percent). In Measurement, only the ruler was used extensively by a majority of teachers. Findings about the teaching of Fractions, Ratio, and Algebra were similar in that relatively little use was made of instructional aids.

The Attained Curriculum: Student Achievement
Many achievement items were classified by content area into subtests to help pinpoint areas of program strength or weakness. Student performance showed growth over the year in all these content areas. As shown in Figure 6, the highest subtest scores (average percentage of items correct out of a possible 100 percent) were observed for items measuring Basic Skills and Probability and Statistics and the lowest for items measuring Geometry and Algebra. There were also consistent differences in achievement between students

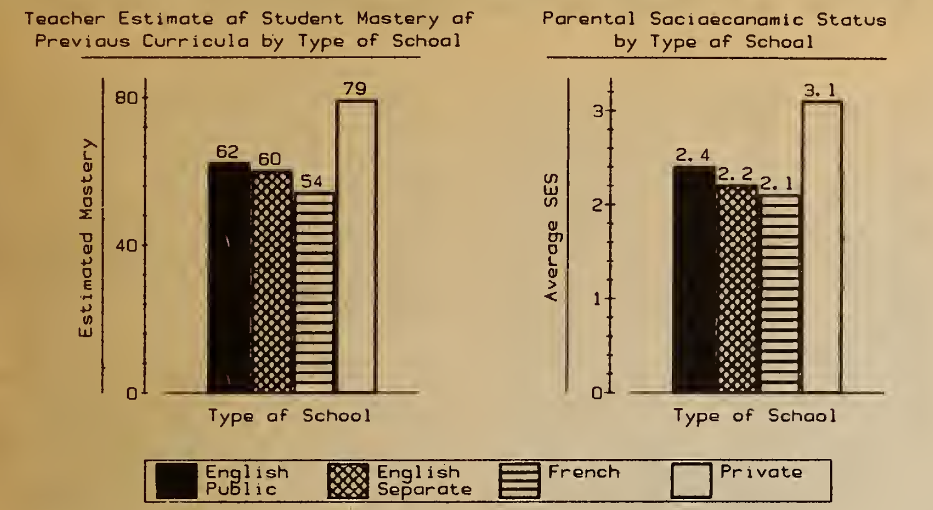


Figure 4

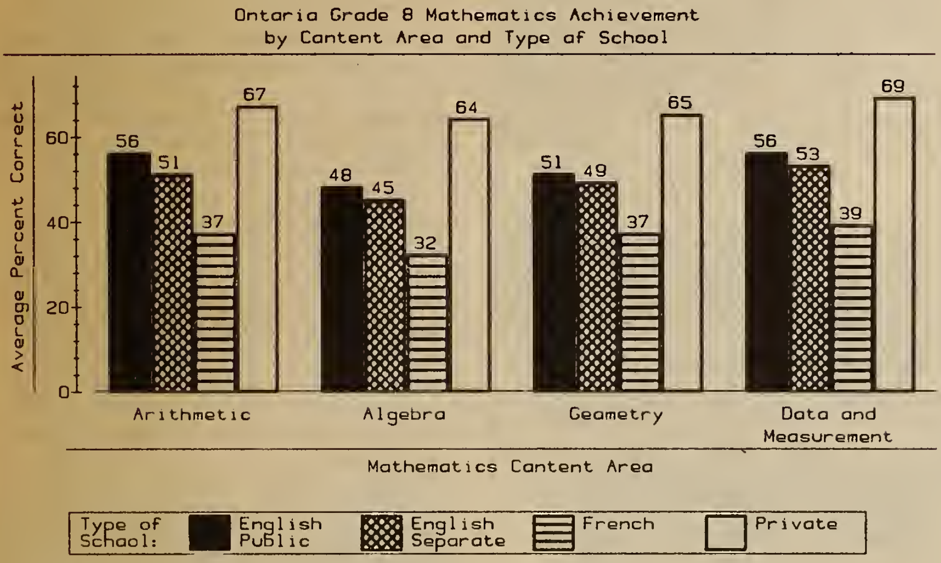
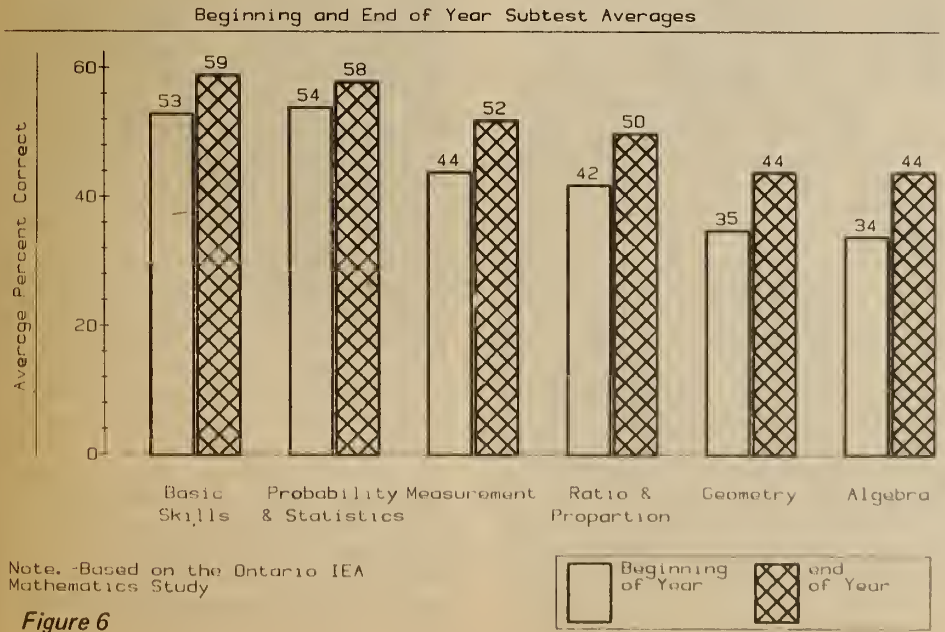


Figure 5



Note. -Based on the Ontario IEA Mathematics Study

Figure 6

enrolled in English Public, English Separate, French-language, and Private Schools.

The significance of these findings must eventually be evaluated in relation both to the expectations of mathematics educators for the Ontario grade 8 mathematics program and to the findings from other participating nations.

The Attained Curriculum: Student Attitudes toward Mathematics

On average, grade 8 students, regardless of the type of schools in which they were enrolled, saw the learning of various mathematics as "important" (3.9 on a 1-5 scale) and "easy" (3.8 on a 1-5 scale). The "liking" of mathematics fell toward the undecided (3.1 on a 1-5 scale). Grade 8 students also gave predominantly positive responses on the "mathematics and myself" measure. However, most of them did not perceive mathematics as useful for jobs or in their everyday lives.

Summary and Implications

In summary, the picture that emerges from the grade 8 findings is as follows:

1. Teachers covered just about all the material that is in the Guidelines except in Geometry.

2. Teachers reported relatively little use of instructional aids and seemed to rely upon a few favored instructional methods. These methods were usually the ones mentioned in the textbooks.

3. Levels of mathematics achievement were related to the kinds of schools in which students were enrolled and to students' overall socioeconomic status.

4. Improvement in mathematics achievement was apparent over the course of the year, with highest end-of-year achievement seen in Basic Skills and Statistics. Students found the Algebra and Geometry questions most difficult.

The finding that teachers make relatively little use of instructional aids and limit themselves to the use of a few instructional techniques suggests some fruitful areas for professional development in faculties of education, in-service education, and studies in education at the graduate level.□

Notes

1. The research referred to in this article was funded under contract by the Ministry of Education, Ontario. The views expressed in the article represent those of the authors and not necessarily those of the Ministry.

2. As mentioned, a further article on the grade 12/13 mathematics study will be published in a subsequent issue of *Orbit*.

Using Children's Literatur

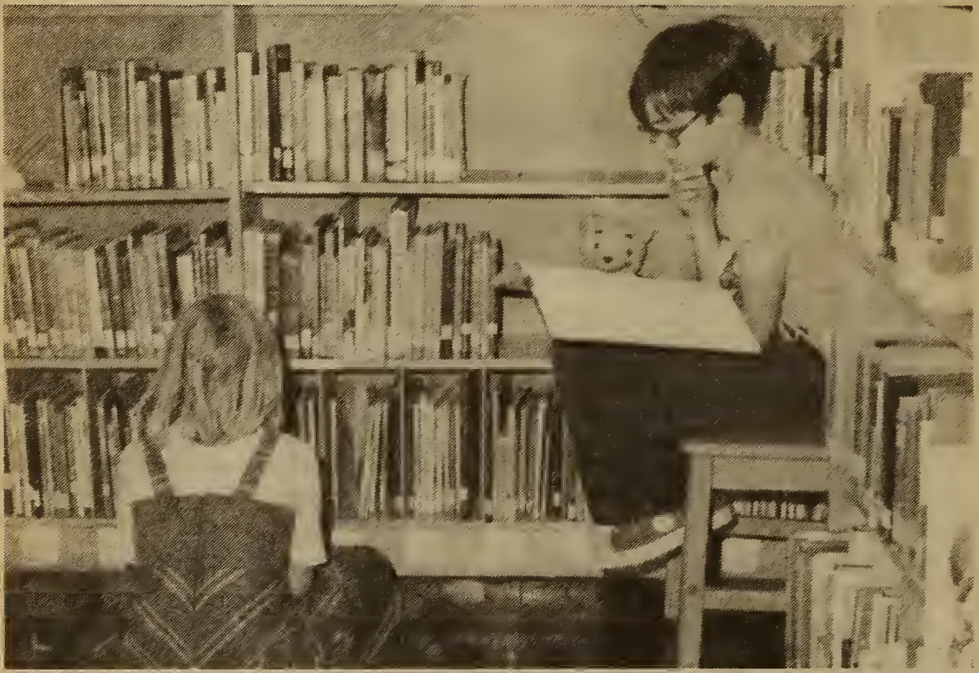
Janet T. Gold,
Washington County Board of Education, Hagerstown, Maryland

The classroom, insofar as it is a society in miniature, provides a place for formative self-concepts to be tested under somewhat controlled conditions. By creating an open and accepting atmosphere, the teacher encourages students to discuss their concerns about establishing self-identity. Part of this open and accepting atmosphere should be the sharing of good literature in which the main character is also striving for those things that make an individual special.

By using literature as a springboard for learning, the teacher can circumvent the threat of direct personal confrontation that would otherwise inhibit in-depth participation. It is always easier to discuss someone else's problems as a third person who is not involved than it is to share inner conflicts of our own. Through class exposure to concept-development literature and responding activities, the students can analyze the growth of a character and use it to aid in their own maturation. Such an activity focusses attention on what is happening here and now in the lives of the students. Direction is given to help students make sense out of their experiences by attempting to conceptualize what happens in the story and applying it to their own situation.

Selection Criteria

Among the usual elements evaluated in a critique of literature—plot, setting, theme, style—characterization is paramount when selecting a book for self-concept development. And because students are being asked to relate to them, the characters in the story must be convincingly real and life-like; they need to show growth and development. Students reading a story who have not been prepared for the resolution of a problem through carefully presented alternatives in the preceding incidents will not accept a sudden leap of maturity needed to cope with the situation. The character's problems must be those familiar to the students in their personal lives so that the process used by the character to resolve the problems can offer guidance to the students in solving their own difficulties. The character should share with the students the internal turmoil of decision-making and problem-solving as the story unfolds. Even as the end of the story is in sight, the disquieting emotions that result from questioning the accuracy of a chosen solution should be understood as an aspect of the reality of growing and life.



Books for Students

Here are a few examples from children's literature of texts that have characters directly involved with building a self-concept.

Black Diamonds. James Houston. New York: Antheneum Publishers, 1982. (Ages 12-14.)
Matt and his Inuit friend, Kayak, must draw on inner strengths that they never knew they had when facing the episodes of this tension-filled adventure—an adventure in which they are left behind by Matt's father and co-pilot who have to fly back to Canada for more supplies.

The Hand-Me-Down Kid. Francine Pascal. East Rutherford: Viking, 1980. (Ages 9-12.)
Being the youngest in the family, Ari gets all the hand-me-downs, which can make a positive self-image difficult. Ari's concerns are typical of her age — her suspicion of having been adopted, her fear of peer rejection, and her need to look grown up.

Humphrey, the Dancing Pig. Arthur Getz. Illustrated by the author. New York: Dial, 1980. (Ages 5-6).
Humphrey is dissatisfied with himself as he is—fat. When he slims down to be as trim as the cat, the farmer puts him to work chasing mice. Humphrey decides perhaps he should be pleased with himself as he was meant to be—fat.

I Want to Be Big. Genie Iverson. Illustrated by David McPhail. New York: Unicorn/Dutton, 1979. (Ages 5-6.)
The advantages and disadvantages of being grown-up are examined from a child's perspective. For example, one advantage to being "big" is being able to dress yourself; a disadvantage might be that you could no longer wear your "fuzzy" bathrobe.

Jasmin. Jan Truss. Vancouver: Douglas & McIntyre, a Groundwood Book, 1982. (Ages 13-14.)
Jasmin tries to escape from her "too-large" family by going off alone to the Canadian wilderness. Prior to her safe return home, Jasmin experiences many adventures that help her to define herself to herself as well as to her family, who tend to be too dependent on her.

Katy Did It. Victoria Boutis. Illustrated by Gail Owens. Greenwillow, 1982. (Ages 9-12.)
On a backpacking trip with her father in the Adirondacks, Katy has an opportunity to prove herself for the first time as a mountain climber. Her wonderment at the mountains as well as at her own bad moods, emotional outbursts, and sense of accomplishment are clearly described to the reader.

Left-Handed Shortstop. Patricia Reilly Giff. Illustrated by Leslie Morrill. New York: Delacorte, 1980. (Ages 9-12.)
Walter is more interested in ecology than baseball, and his fourth grade friends do not understand. The tale tells of an

e to Teach Self-Concept

insecure boy who is unable or unwilling to conform to what his peers think he should be.

Oliver Button Is a Sissy. Tomie De Paola. Illustrated by the author. New York: Harcourt, 1979. (Ages 7-8.)
Oliver is presented as a determined, committed young man who knows who he is and where he is going. This leads to tauntings from his classmates, who do not understand a boy who doesn't "like to do things that boys are supposed to do." With support from his parents and teachers, Oliver is accepted by the group.

Only Jody. Judy Delton. Boston: Houghton Mifflin Company, 1982. (Ages 9-12.)
Defining one's male self-image is hard enough when you are a fifth-grader, but in a household of three women and with a name like Jody, it could be downright impossible. This is a tale of a young man coming to grips with himself while seeking unusual ways to raise money.

Rosie's Double Dare. Robie H. Harris. Illustrated by Tony De Luna. New York: Knopf, 1980. (Ages 9-12.)
Like many young people of her age, Rosie is desperate to be accepted by her peers. Being shorter than the rest of the children does not help. To gain acceptance, Rosie agrees to two secret dares that lead to many amusing consequences.

A Salmon for Simon. Betty Waterton. Illustrated by Ann Blades. New York: Antheneum Publishers, 1980. (Ages 7-8.)
Simon, a small Canadian Indian boy, must cope with the feelings of failure and success (and how those feelings affect his self-image) when he tries to catch a salmon. A strange quirk of fate offers him a salmon, and Simon must then decide whether to define himself as "killer" or "helper."

Samuel's Tree House. Bethany Tudor. Illustrated by the author. Cleveland: Collins, 1979. (Ages 5-6.)
Samuel, a duck, and his friends are building a tree house. As the house progresses, Samuel is shown how to establish his independence and, at the same time, to realize the importance, and even fun, of doing things together.

Thalia Brown and the Blue Bug. Michelle Dionetti. Illustrated by James Calvin. Reading: Addison, 1979. (Ages 7-8.)
Thalia is the middle child who must depend on her own resources to occupy her time. Through perseverance and the help of a sympathetic neighbor, Thalia discovers something very special about herself that leads to a positive self-concept.

What If They Knew? Patricia Hermes. New York: Harcourt, 1980. (Ages 13-14.)
Jeremy learns that she can be accepted by her peers and teachers just as she is. Her fears and doubts are well-portrayed, as are the lessons in loyalty and friendship.

Books for Teachers
Here are some books for teachers who might like to go a bit further with self-concept development in the classroom.

100 Ways to Enhance Self-concept in the Classroom, a Handbook for Teachers and Parents. Jack Canfield and Harold C. Wells. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1976.
An extensive collection of activities that is divided into units emphasizing environments of positive support, individual strengths, self-identity, body acceptance, goal setting, language of the self, and relations with others.

The Bookfinder: A Guide to Children's Literature about the Needs and Problems of Youth Aged 2-15. Sharon Spredemann Dreyer. Circle Pines, MI: American Guidance Service, 1981.
This reference for all those interested in selecting books that promote children's mental health annotates close to 2000 titles and categorizes them by such topics as responsibility, divorce, guilt, going to the hospital, parents, siblings, boy-girl relationships, sex, and death.

Building Positive Self-concepts. Donald W. Felker. Minneapolis: Burgess Publishing Company, 1974.
Self-concept development is discussed in infancy and childhood, in the elementary years, and during adolescence. A specific five-step approach for the teaching of self-concept is presented.

Focusing on the Strengths of Children. Linda B. Gambrell and Robert M. Wilson. Belmont, California: Fearon Publishers, 1973.
The book begins by presenting a case for focusing on strengths. It then follows through with specific in-class techniques incorporated in units on self-perception, self-control, grouping, instruction, and teaching strategies. Methods of record-keeping for illustrating individual student strengths are also discussed.

Activities
To make the sharing of literature in the classroom more meaningful, activities should establish a relationship between the interests and needs of the students and the content of the story. Such activities can be divided into two categories: general responses to literature and responses of a more specific nature related to building self-concept.

General responses—General responses to literature might include storytelling, book discussions, dramatic activities (role play, creative dramatics, story theatre, improvisations or puppetry), and written responses. The reader may wish to refer to *Children and Books* (Fifth Edition) by Sutherland and Arbuthnot for further details about developing these kinds of responses.

Specific responses—Self-concept specific responses should be viewed as possible suggestions to be used at any point in the presentation of the literature—before reading as a motivating introduction, during the reading as a clarifier, or after as a follow-through lesson. By using the character's thoughts as presented in the story, the class may be able to interpret feelings and involvement in crises that they would otherwise be unwilling or unable to share.

Discussion always lends itself well to the classroom setting. Whole-class involvement in a single discussion may be supplemented with interest groups, buzz groups, variably-sized groups, triads, or pairs. Prior to the actual discussion, students should be allowed a few moments to reflect on the topic. This moment of reflection will help them to personalize the discussion and to sort out their thoughts.

Some possible topics of discussion might be:

1. How are you different from others?
2. How do you grow as a person?
3. Things that you do well and things that are hard for you to do. Why are things hard or easy?
4. Where do we get our self-concepts?
5. How is your self-concept tested when you experience . . . anger? jealousy? fear? frustration?

The purpose of discussion is to help the students clarify their behaviors, values, goals, and relations with others. No student should be ridiculed for an opinion or a position that is different from that of the other students. Likewise, if a student does not care to reveal personal feelings during the discussion, no pressure should be brought to bear. Students must feel free to add to the discussion or to participate through their silence.

Once they become fairly comfortable with the ideas and philosophies by building self-concepts, *self-concept lessons* can be developed by the students themselves. Help them prepare such a lesson for a younger group of children, using a book appropriate for that child's age. If possible, arrange to have the lesson actually presented to a group of youngsters. To help the presenting students feel confident in this leadership role, let them work in pairs with a group of three or four younger students.

Probably one of the greatest turmoils of growing and realizing oneself fully is the acceptance of strong emotions. As a class, make a list of the various strong emotions and define each one clearly. Then, once the class has generated a list, have them pair off to list causes and resolutions. (*List and Resolve* as I call this activity). This listing can be done by dividing a paper into three columns: the first is labeled "emotion"; the second, "cause"; and the third, "resolution." The students may, of course, list more than one cause and/or resolution for each emotion.

When the pairs are satisfied that they have found causes and resolutions for each of the emotions, ask them what they might do if their suggestions do not work. This will hopefully lead the class to list those healthy outlets for emotions such as talking the problem over with someone, having a good cry to release tension, listening to music, playing sports, working, and going for a walk or a hike.

Literature, unlike life, can be slowed to where each facet of the character's personality growth can be examined carefully, thereby allowing each student time to internalize the lesson for possible use at a later time.☐

Les Stages d'Expérience au Travail dans le Cadre de l'Enseignement Commercial, Valent-ils La Peine?

Ghislaine Fecteau
Centre Universitaire de Shippigan,
Université de Moncton

Parfois on se demande si tous les préparatifs et les énergies depensés pour l'organisation et la participation des stages d'expérience au travail dans le cadre de l'enseignement commercial en valent la peine? Jouent-ils un rôle dans le placement des étudiants? D'après moi, sur un nombre de dix-sept diplômés d'un programme de commis-dactylo d'une année qui se sont trouvés un emploi, huit d'entre eux se sont placés à l'endroit où ils ont fait leur stage. D'après les résultats obtenus d'une recherche auprès des étudiants du département de l'enseignement commercial de Annandale, Campus de Northern Virginia Community College, 63 pour cent des stagiaires se sont trouvés un emploi permanent en moins d'un mois en comparaison de 37 pour cent des non stagiaires. Il semblerait, de ce fait, que les stagiaires se placent plus vite.

D'après mon expérience avec les stages aux niveaux secondaires et collégiales, les stages d'expérience au travail valent la peine et jouent un rôle très important dans le placement des étudiants. Il ne faut pas croire qu'avec les stages, on ne rencontre que des avantages. Il y a des inconvénients, mais les avantages semblent l'emporter sur ces derniers.

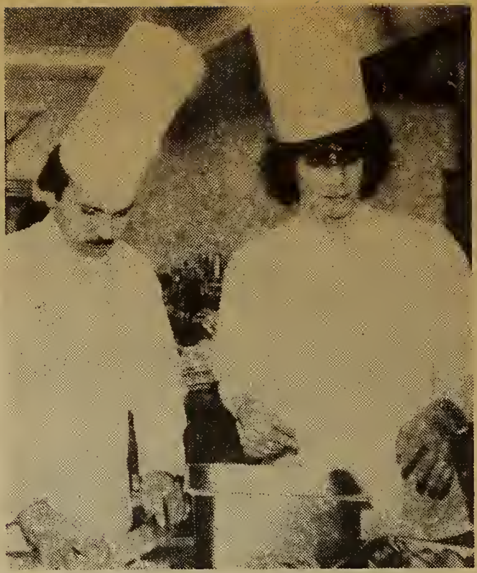
AVANTAGES

L'étudiant

Les stages permettent à l'étudiant de découvrir ses intérêts et ses capacités et développent une bonne compréhension des opportunités d'emploi et des responsabilités de travail. Ils amènent l'étudiant à s'intéresser au monde des affaires et au monde du travail, facilitant le choix de sa carrière. En somme, cette expérience au travail développe de bonnes habitudes de travail, l'attitude nécessaire pour atteindre une plus grande maturité et une certaine compétence. Des écrivains ont avancé que les stages pratiques donnent la chance de se servir de ses habiletés en utilisant l'équipement disponible tout en apportant une signification à la théorie apprise en classe. De plus, les stages fournissent à l'étudiant l'occasion de se servir de l'école et du monde du travail pour son apprentissage personnel. L'important est qu'ils favorisent le travail avec d'autres employés, permettant ainsi de mieux comprendre le facteur humain dans les affaires. Dans un autre ordre d'idées, ils servent à l'étudiant de test d'aptitude dans le domaine de travail choisi, permettent à l'étudiant d'observer des employés à l'oeuvre et lui donnent la chance de faire valoir ses capacités et ses aptitudes lorsqu'il exerce un poste pendant quelques semaines; ce qui pourrait l'amener à obtenir un emploi à temps partiel ou à plein temps. Des recherches démontrent que les stages aident l'étudiant qui veut se trouver un emploi immédiatement après avoir complété son cours. D'après ces dernières, les employeurs sont beaucoup plus satisfaits de diplômés qui ont fait un stage d'expérience au travail que de diplômés qui n'en ont pas fait. Pour conclure en ce qui concerne les avantages, on peut ajouter que cette expérience place l'étudiant en contact avec un monde adulte, ce qui peut lui permettre de mettre ses propres valeurs en question, de réévaluer son potentiel au travail et de faire face avec plus d'assurance à des situations sociales.

L'école

On peut dire, sans hésitation, que l'école, par l'entremise des stages, a permis de mettre beaucoup plus de facilités à la disposition de l'étudiant tels que de la documentation technique supplémentaire, des machines de bureaux modernes qui rendent l'apprentissage plus efficace, sans frais additionnels pour l'école. Ceci peut fournier aux enseignants, aux conseillers en orientation et aux administrateurs, l'opportunité de demeurer au courant des changements qui surviennent dans le monde du travail. Cette expérience au travail sensibilise les administrateurs, les enseignants de la division de l'enseignement commercial et les étudiants aux besoins du monde des affaires. En retour, le monde des affaires s'intéresse à ce que l'école essaie de faire et envisage une façon concrète de s'y prendre afin d'aider à l'amélioration des programmes d'étude. Enfin, les stages regroupent le monde des affaires, le marché du travail et l'école dans le but commun de donner une bonne formation professionnelle à l'étudiant, tout



en permettant à l'école d'évaluer ses programmes d'études. L'école a besoin du monde des affaires, et par l'entremise des stages, ça lui permet d'établir de bonnes relations publiques et de meilleures communications avec le monde des affaires. Enfin, on peut certainement ajouter que cette expérience au travail crée une atmosphère de travail. Il est difficile pour les enseignants d'essayer de donner cette image. L'expérience au travail peut développer des attitudes réalistes quant à la vitesse, la quantité (production) et l'efficacité.

L'employeur
Certains auteurs ont identifié que pour les employeurs il y avait aussi des avantages en permettant aux étudiants de faire des stages chez eux. La majorité des entreprises accepte des stagiaires volontairement et avec plaisir, car ça leur donne la chance de rendre un service à la communauté et de faire preuve de bonnes relations publiques, c'est du moins, d'après certains chercheurs, ce qui motive une entreprise. Pendant qu'il est au service des employeurs, ces derniers peuvent confier des travaux et des responsabilités au stagiaire et ainsi enlever un surplus de travail à d'autres employés. Les employeurs auront l'occasion de rencontrer l'étudiant motivé, intéressé, possédant des aptitudes aptes à devenir un bon employé futur; ils auront la chance d'entraîner un stagiaire comme s'ils avaient l'intention de le garder à leur service et pourront même embaucher un étudiant ayant un cours complet. Il va sans dire que les employeurs aident l'étudiant à faire la transition de l'école au travail et l'étudiant ainsi que l'école sont très conscients de cela. Aussi, les employeurs sont ceux qui aident l'école à se garder au courant des choses nouvelles dans le monde des affaires et sur le marché du travail.

La communauté
La communauté est toujours intéressée à ce qui se passe à l'école et dans le monde du travail, et elle aussi peut en profiter. A mon avis, le premier avantage à la communauté est que les stages lui donnent un moyen efficace de faire de l'étudiant un citoyen productif, tout en permettant de placer des étudiants sur le marché du travail. Certains auteurs ont identifié que les stages offrent l'opportunité à la communauté, comme unité, de s'intéresser à l'évolution de ses étudiants et permet de trouver de l'entraînement adéquat sur des machines modernes dans plusieurs domaines à un coût raisonnable pour la communauté. En revanche, les stages encouragent les étudiants à demeurer dans leur communauté après avoir complété leurs cours. Cette expérience au travail donne l'occasion à la communauté de vérifier le degré de compétence de l'enseignement et de l'orientation à l'école, puisque le concept de l'éducation n'est-il pas l'une des responsabilités de la communauté. . . .

INCONVÉNIENTS

Bien qu'il y ait beaucoup plus d'avantages aux stages d'expérience au travail, on rencontre aussi des inconvénients, très minimes soient-ils. Les stages demandent du travail supplémentaire de la part des enseignants. Mais, il faut considérer sérieusement la décision d'envoyer les étudiants à faire un stage et il faut essayer d'en vendre l'idée au monde des affaires.

L'étudiant
L'étudiant, dans certains cas, ne reçoit probablement pas un bon entraînement puisqu'il est parfois assigné à un poste et y demeure pendant toute la période du stage. Il serait probablement mieux de lui assigner un certain éventail de tâches. D'autres étudiants accomplissent parfois des tâches routinières dans le travail de bureau. Dans certaines recherches, il fut remarqué que des étudiants en sténographie n'étaient pas assignés à la sténographie au début, et même plus tard, vers la fin du stage. Certains étudiants peuvent avoir des problèmes de transport, ce qui occasionne des frais additionnels, tandis que d'autres ne peuvent pas participer à des activités para-scolaires durant ce temps. En revanche, certains doivent sortir de leur région, ce qui veut dire, se trouver et payer chambre et pension.

L'école
L'école aussi peut rencontrer des inconvénients. Pour des étudiants, les stages peuvent causer des conflits d'horaire. Il y a les dépenses de la supervision des stages, puisqu'il faut ajouter les frais de repas, de logement, de transport et de la documentation de la feuille de dépenses. Parfois, il peut y avoir un manque de coordonnateurs qualifiés.

L'employeur
L'employeur n'est pas exclu des inconvénients. Pour lui, ça peut être coûteux d'entraîner une nouvelle personne et parfois, cela peut créer chez les autres employés une certaine insécurité d'emploi.

La communauté
A certaines occasions, il est difficile de trouver des endroits pour les stages, parce qu'il existe des communautés qui sont petites.

Pour conclure, il ne faut pas oublier que l'organisation des stages d'expérience au travail fait l'object d'une présentation attentive, aussi bien de la part de l'établissement scolaire que de la part de l'entreprise. L'étudiant, l'école, l'employeur et la communauté ne devront pas avoir peur de jouer leur rôle dans la participation des stages. Il ne faut pas oublier que les coordonnateurs des stages devraient être bien qualifiés. Ces responsables devront savoir comment organiser l'apprentissage de l'étudiant à l'école et pendant le stage. L'étudiant devrait être assez bien entraîné pour pouvoir utiliser les techniques disponibles à l'école et à l'endroit où il fera son stage. A la lumière des avantages et des inconvénients, les stages, valent-ils la peine? Qu'en pensez-vous?☐

Lac La Croix Schools, Secondary School in the foreground.

EDUCATION in an ISOLATED COMMUNITY

John Davis,
Field Services and Extension, OISE
and Wayne Seller,
OISE Northwestern Centre

Lac La Croix is an isolated Indian community in northwestern Ontario. The community has a small, modern elementary school and an even smaller secondary school, with possibly the smallest enrolment in Ontario. We were motivated to study these schools because of our interest in similar schools where the isolation often results in two severe problems: their enrolments are usually small, which, in turn, means that their programs are limited; and their isolation prevents them from trying to expand those programs by cooperating with other schools. The Lac La Croix schools are also unique in that, although they are Indian band schools, they are administered by a provincial board of education—namely, the Fort Frances Board. The terms of the agreement with the Board are such that the band council has considerable input into determining the content of the school curriculum.

A group of students outside the Elementary School.

In his 1981 OECD/CERI report, *Rural Education in Urbanized Nations,* Jonathan Sher suggests that some of the distinguishing features of rural schools are: the restrictive nature of their curricula; the relative inflexibility of their programs; and the questionable relevance of the programs to the lives of their students. The Lac La Croix setting seemed to be ideal for seeing how well Sher's conclusions fitted the Canadian scene. Since school size and isolation are determined largely by the community in which the school is set, a brief description of the village is in order.

The Community

The Lac La Croix village is spread over an area of a square mile. It has a population of about 260 people all but six of whom are Ojibway Indians; the six are white teachers. The village is located at the south-west boundary of Quetico Provincial Park about 85 air kilometres from Fort Frances and the Boundary Waters Canoe Area in Minnesota. There are no conventional roads into the village although, after the lake freezes, there is a winter road across the ice from Crane Lake, Minnesota; this road is usually open for three months of the year, enabling heavy supplies to be brought in. During the summer months, there is boat and plane service to Fort Frances.

But for a few weeks in the autumn when the lake is freezing and in the spring when the break-up makes the lake unnavigable, both boat and air transportation (which uses the lake as a landing strip) are impossible. The village has recently been linked with the outside by telephone and by satellite TV dish. Electricity is brought from the United States; but power failures are common, and discussions are taking place about the construction of a hydro-electric power plant on the reserve. As well, consideration is being given to building an eight-mile stretch of private road through the bush, so as to provide controlled access to the village from a public highway.

The economic base of the village is limited. Several people work at the band office, an especially popular place of employment for girls graduating from the high school. In the summer, many men are employed as construction workers, while fifty-seven persons are qualified to act as guides at nearby hunting camps. In the winter, the men hunt for their own meat and make money trapping; there are no less than fifteen trap lines, which supply pelts of beaver, muskrat, marten, fisher, and otter. Should the proposed road be built, the band is considering the construction and operation of its own resort, with stores and a gas station.

The village may be perceived as isolated only in relation to most other communities. In fact, the access it does have to the outside through communications technology and the (albeit expensive) air service is bringing about changes in the culture of the village. These changes pose serious problems for the older parents and village elders. On the one hand, they realize that change is inevitable but, on the other hand, they wish to preserve their traditional values. The family unit and extended family are strong. Individual members are valued and supported in their participation in community life. There is a strong sense of belonging among young and old villagers alike and pride in their traditional way of life. Two interesting manifestations of this pride may be detected. First, most people who leave the village return. The population is gradually increasing, a reversal of the trend commonly found in small rural hamlets. Second, there has been a revitalization of the old animistic native religion. A village councillor, reflecting on the changes occurring since his youth, recalled that when he was a boy, there was an active Catholic mission in the village: the young were baptized, and the older folk who clung to the old beliefs were forced to practise their ceremonies in the bush. Today, no sign of Christianity is readily evident in the village. The councillor added (and, we thought, with some satisfaction) that now it was the Christians who had to go to the bush!

The Christian baptism in their childhood of people who are now middle-aged has created an ironic situation in that this middle-age group are encouraging the revitalization of the traditional culture but are denied the opportunities to participate fully in it because of their earlier baptism. The councillor, a member of this group, feels strongly that the resurgence of the old traditional culture has been responsible for instilling a new sense of confidence into the young people and, as well, for supporting the idea of formal education, a particular concern of the band council.

The Schools

In the 1950s, the Department of Indian Affairs (DIA) built in the village an attractive elementary school comprising four classrooms and various other such rooms as a library, staff room and office. Students who wanted an education beyond grade 8 had to leave the village and go to Fort Frances or to another urban centre. There they found a big discrepancy in the type of instruction they received compared to the intimate learning they had known in their small village school. They could not seem to fit into their new surroundings and during that time, only one managed to graduate from secondary school. Eventually, the increasing number of grade 8 graduates who wanted further schooling but who did not want to leave home prompted the band council to approach the federal government for a high school. In the early 1970s, this request was granted, and a small secondary school operation was begun in three separate buildings. Then, in 1981, the band constructed a new high school complex, consisting of four teaching areas built around a full-sized gymnasium. The gymnasium also serves as a cultural/recreational centre for the community.

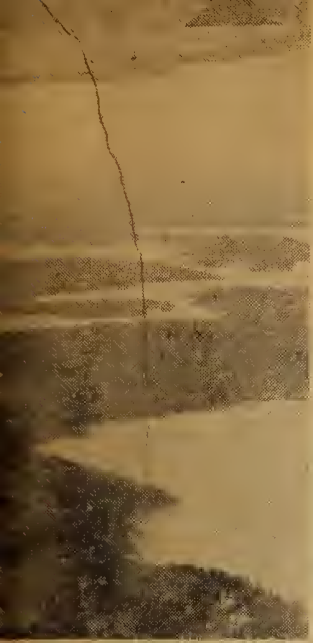
In 1974, the first of a series of annual agreements was reached among the Lac La Croix band council, the Fort Frances Board of Education, and the Department of Indian Affairs. Under the terms of the agreement, the band council is responsible for the nature of the school program, the Department of Indian Affairs determines the numbers of staff, and the Fort Frances Board hires the staff and administers the program. A committee of four parents has been established by the band council to liaise between the community and the school. The Board has no capital investment in the school: the new high school belongs to the bands; the elementary school and the teacherages belong to the DIA. Of the seven teachers, one is a native and comes from the village; the others are from outside and usually remain for up to five years. New teachers invariably experience culture shock when they first arrive in the village because of its limited contact with the outside. Single teachers seem to fit in better than married couples: they are freer from personal obligations and are able to participate in a variety of outdoors activities. Unfortunately, however, the teacherages have been constructed apart from the village, creating what one of the band council described as two ghettoes.

It was the band council's decision that the program in both the elementary and secondary schools should follow the provincial guidelines, with standards comparable to the rest of the province so that graduates would not be disadvantaged when seeking admission to post-secondary institutions. At the elementary level, this decision has meant that the school operates much like any other school in the province. At the secondary level, the decision has resulted in a general level grade 9-to-12 program that concentrates on English, History, Geography, Mathematics, Science, and Physical Education. A sparsely-equipped facility offers shop at the grade 9 and 10 levels. The core subjects have been protected carefully over the years because there is a strong feeling that no program (i.e. non-academic) should be allowed which might insinuate that Indian students cannot be as successful as other students.

Occasionally, at the secondary school a staff change will result in art or music being offered for a time; but on the whole, the program is fairly rigid and inflexible. Some attempt has been made to supplement the school's curriculum by offering correspondence courses. These were run by the board, and teacher support was made available. Sixteen students enrolled but none finished the year.

At first glance, the secondary school curriculum seems to be excellent. Students enter post-secondary programs well prepared academically and successfully complete courses in which they enrol—a tribute to the conscientiousness of their high school teachers, who often have a workload of eight preparations a day. However, upon closer examination, certain disturbing factors emerge. Very few students use their educational background for their personal goals, and, with one exception, no graduate has completed the entire program in a post-secondary institution. Inevitably, graduates in those institutions withdraw and return to the reserve. When questioned about this, they say that the life style in larger centres makes them feel lonely. They miss their closely knit family and community, and the outdoors with its hunting and fishing. Some have too much time on their hands and encounter problems with drugs and alcohol. The high school program appears to prepare them well *academically* for life outside the reserve but it is not as effective in preparing them *emotionally* or *socially*.

When discussing this problem, an adult member of the reserve suggested that one way it might be overcome would be to institute an exchange program with other schools during the year. Students then could get experience in adjusting to other places, beginning at an early age, and gradually extending the time as they grew older. By the time they had completed high school, they



hopefully would be accustomed to being away from home and would be able to handle their new educational environment. However, another parent felt that the problem was rooted in the federal government's policy toward native people on reserves where "everything is given to them" and where there is limited exposure to the outside world. Consequently, "when they leave after grade 12 in Lac La Croix, they not only have to adjust to a larger centre and different culture but they also begin to realize that they have to work to survive and are not used to this." As a result, they return to the reserve.

Almost without exception, the parents favored the academic core courses presently being offered in the high school, but some of the students who were interviewed suggested that they would also like programs on computer studies and music. Their plans for education beyond high school often seemed to be made with a view to returning to the reserve to work. At the same time, they acknowledged the lack of opportunities for work there. Teachers, too, noted the inappropriateness of courses taught for life in the village community. They identified a need for courses of a practical and technical nature which could teach useable skills to the students, but they felt frustrated by the lack of resources to teach such courses. The lack of a well-equipped resource centre was especially noted. Although they understand the band council's support of the present program, the teachers are concerned by the large numbers of unemployed young people on the reserve, most of whom have been unable to use their educational background to help achieve their personal goals.

The problems endemic to rural education, as identified by Sher, emerge all too clearly in this small school. The range of subjects in the curriculum is small; there is almost no flexibility in the offerings from year to year; and the curriculum seemingly does little to prepare students for coping with the realities of life either outside or on the reserve. However, it is important to note that such perceptions of the curriculum's shortcomings are not shared universally. Like Sher, we concluded that the curriculum was inadequate, and this perception was shared to some extent by the teachers and students. But the parents, and particularly the band council who negotiated the provision of services with the Fort Frances Board, were adamant that the curriculum should not be changed. Their attitude is undoubtedly linked with their desire to maintain the traditions of the past—and in the past, educated persons were those who had been schooled in the arts and sciences. For traditionalists, even today, technical and commercial subjects are considered inferior—although, happily, such attitudes are gradually changing.

In the Lac La Croix school, technical and commercial subjects could prepare students for a future (discussed later) in which they might be called upon to use those skills. Whether the tiny school could provide such courses is a matter of conjecture. If the band council were to approve, it would seem possible to use carefully supervised distance education courses to cover much of the basic academic core, thus freeing one staff position to be filled with a technically oriented specialist, an approach which has been used successfully elsewhere with non-native students. Its acceptance depends upon a particular mental set on the part of all those concerned with secondary education. Unfortunately, at present, that set is not sufficiently accepted in Lac La Croix.

The Future

A road, a dam, and an expanded educational program could be three important elements in the future of Lac La Croix. The completion of the road to the village would make it less isolated. Access to other communities would be easier and outsiders would be encouraged to come in, especially if the band council's idea of building its own resort comes to fruition. Similarly, if plans proceed to build a hydro-electric power dam on the reserve, the village could expect an influx of outside workers. Should these two projects be undertaken, the forces which once threatened the village's existence—alcohol and drugs—would likely return. The reemergence of traditional values and mores parallels the move by the council to prohibit drugs and alcohol on the reserve. Prohibition brought back many former residents, and isolation has made the enforcement of the prohibition possible. Construction projects would make control difficult.

On the positive side, the road could have a significant impact on the high school program. Other native reserves are learning of the school's success. At present, their students are attending high school in larger centres, but since their graduation rate is very low, there is a chance that these students could use the proposed roadway to attend school in Lac La Croix. This would mean increased enrolment, more teachers, and more funds. In turn, this would lead to more options and resources. The academic core could be enlarged and new courses could be developed to respond to emerging student needs and interests. In part, the obvious solution to many of the problems of this isolated small school could come about through lessening its isolation and increasing its enrolment. This may well happen in the foreseeable future.☐

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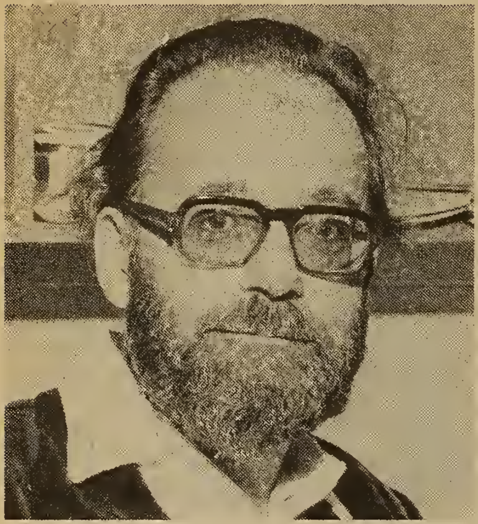
PETER McLAREN INTERVIEWS RICHARD COURTNEY

“Expression in the Arts is absolutely neces

Richard Courtney of OISE's Curriculum Department is interviewed by Peter McLaren, a doctoral student in the same department and author of *Cries from the Corridor.*



Richard Courtney

Arriving in Canada from England in 1967, Richard Courtney is now an ardent and vociferous member of the Canadian arts and education establishment. He is as at home writing books on native Indian rituals or the history of British drama as he is comparing life to a Pirandello play or discussing the most recent development in art therapy, anthropological theory, and literary criticism.

His first teaching appointment was in West Suffolk, England, in 1948. The untapped potential of drama as a way to improve cognition, affect, and creativity has occupied Professor Courtney for more than thirty years of his teaching career: as a senior lecturer at Trent Park College, Middlesex; as an associate professor of theatre at the University of Victoria; as a drama professor at the University of Calgary; and presently as professor of Arts and Education at the Ontario Institute for Studies in Education, where he is cross-appointed to the University of Toronto's Graduate Centre for Drama. He is a Fellow of the Royal Society of the Arts, and has been honored with the Alberta Achievement Award and the Canadian Silver Jubilee Medal for his work in arts and education. He has lectured all over the world and, in 1979, was Visiting Professor, Melbourne State College, Australia.

Professor Courtney's vast contribution to education is nowhere more evident than in the popularity of his many books: *Re-Play, The Dramatic Curriculum, Play, Drama and Thought*—each title evokes the ancient *Theatrum Mundi,* “All the world's a stage.” And nearly all his work is based on the principle that spontaneous dramatic action will enable students to “re-cognize” the world through “re-play.”

Professor Courtney is taking a sabbatical leave beginning this Christmas. He will spend some time in New Mexico to continue his lifelong study of shamanism and ritual.

The eyes dart behind thick-framed glasses; the nose wrinkles, the long hair sways; and a succession of words, clipped and humming, emerges from somewhere around the middle of a wagging beard.

At first you are reminded of an Elizabethan portrait come to life. But suddenly, as the subject changes from the Shavian dramaturgic formula to back-to-the-basics-philistinism, and as he rolls up his sleeves, the Elizabethan visage melts into an amalgam of classical scholar and brawny longshoreman. Like an implacable Trickster, he seems to change images at will. You stare fixedly at his eyes, waiting to see which persona will materialize next: the inner-city teacher, the professional actor, the set designer, the theatre director, the painter, the gentleman shaman, or the curriculum Dream-Stalker.

McLaren: You've often claimed that spontaneous drama—or its many disguises as creative drama, creative dramatics, improvisation—is absolutely essential for learning anything.

Courtney: Yes, spontaneous drama—not theatre, necessarily.

McLaren: Right. In addition, you state in your books that the arts—and I take your meaning of arts to include music, theatre, and literature—are conducive to the development of personality, the enhancement of social growth, and self-actualization. You also claim that the arts can contribute in no small way to the improvement of a student's academic subjects, such as reading and language arts. These are rather grand claims to say the least, but if what you say is true, then why aren't we witnessing a proliferation of the arts in the curriculum guidelines set up by the Ministry or boards of education? If the arts are so essential, why aren't they more highlighted in the curriculum programs of schools?

Courtney: Well, first we have to realize our place in history and in time. In fact the arts are remarkably well highlighted compared with only a few years ago. When I first came to Toronto as a visitor, in 1967, I could identify only one full-time drama teacher in the whole city. Things are vastly different today. There are now hundreds of drama teachers all over the province, making up at least two professional associations. So there has been a considerable change. Yet the change has not been, it's fair to say, as radical as one would like.

The reality is that the attitude toward learning that I'm putting forward is a post-Einsteinian model. This is not something that will create a major change over a *short* time. If you look at the history of education in the western world through to this century, changes have been slow and steady. I don't expect the major change to occur for another two or three generations. But it'll come. In summary, what I'm saying is that we're on the side of the angels.

McLaren: You've also stated that the whole of the school curriculum can be viewed in dramatic terms, that it can provide a motivational touchstone for program content. In other words, the dramatic curriculum, as you call it, can include such diverse subjects as math, language arts, music, and history.

Courtney: Anything!

McLaren: Anything? Well I'm wondering what the multidisciplinary curriculum approach, holistically, from the position of re-play, would look like. . . . But first of all, could you just explain what you mean by “re-play”? I understand “re-play” to be almost a synonym for the dramatic arts. Is that right?

Courtney: Well, it's a phrase McLuhan used when he was trying to describe my theory of imagination. He said, “What you mean is, re-play is re-cognition!” In other words, if we re-play an event in our lives, something from our past, and we want to act it out in an improvisation, what we're trying to do is to know it better. Now that's obvious in terms of drama therapy where someone is disturbed; what the person is doing is to re-play disturbing events in his or her life, trying to adjust to them. It has the same place that Hadfield says the dream has—namely it is an attempt to adjust to previous problems.

But it isn't just significant at the level of therapy: as McLuhan said, re-play is

ary for emotional and aesthetic growth.”

re-*cognition*. In other words, it's re-*thinking*. It's a cognitive process. Acting, improvised acting, is itself a form of knowing—that is, I know something when I act. I can't necessarily put it into words.

In fact, there are two kinds of knowledge. One is the knowledge of *acting* something. The other is the knowledge that comes about when I *talk* about that doing. Of the two kinds of knowledge, acting gives the primary kind of knowledge—"doing knowledge" like that of a hockey player. A hockey player is a dramatist: he has certain kinds of knowing (about the puck, and the ice, and how fast he can skate, what he can do, and so on), but you can't necessarily put that knowledge into words. When you put it into words, it becomes a different kind of knowing.

Now, this primary knowing, this active knowing, has to be *re*-cognized; it has to be *re*-thought and thereby *recognized*. In other words, drama makes learning permanent. The famous quotation of Joseph Lee is very applicable!: "If you are eight years old and you have acted the part of Christopher Columbus, you never forget that it was *you* who discovered America!"

As to what a multidisciplinary curriculum would like like, I'm afraid that's difficult to answer. Any program in schools, it seems to me, should arise from the needs of the students—as seen in their age, ability, and aptitude.

McLaren: Okay then, let's move into the area of language arts for a moment and take a look at reading. Let's pretend I'm a grade 6 student who's having problems in that subject. Now presumably you could look at reading as a dramatic event, the "drama of reading" so to speak. How could you, as my reading teacher, help improve my reading using your methods of spontaneous drama or re-play?

Courtney: Very simply, I would attempt with you to create situations in which you *needed* to read. I'd rather not deal with the grade you're talking about because I have another instance which can better exemplify what I mean.

A kindergarten child had just arrived in the school. She was a non-reader, whereas four or five of her playmates could read. I was observing the first school day of this child and realized that she couldn't read. During the afternoon, she came into the room wanting to play with two of the other girls, and they said, "No, you can't play with us; you see, you're not a witch." And she said, "Yes, I *am* a witch. I'll show you!" She went away, and got a big piece of card which she cut out with a large pair of scissors; and then she took a picture of a witch from the teacher's drawer with the name "witch" underneath, and she copied it out on this card—incorrectly, of course. She put down, Scribble, scribble, scribble. She got a large pin and fixed the card to her front and went over to the others with the scribble pinned to her, saying, "Look, I'm a witch." "So you are," they said. "Now you can play with us."

One month to the day, I went into this same playroom, and this child was in a Wendy house with three or four other children and dolls and a teddybear. She was reading out loud to them from one of the old Janet and John reading books. I said to the teacher, "Tell me, Bobby, what did you do to teach this child to read?" And she said, "I didn't do anything. Don't you understand? You saw the child *needing* to read and write a month ago. All I've done is put things in her way so that she will develop this motivation." The child needed to read in order to play.

Simply, when people *need* to read, they read. But obviously, if you're dealing with grade 8, grade 9, there are other techniques. All one needs to do is extrapolate from the kindergarten instance with other techniques.

McLaren: The approach you're describing has been called "holistic" and "aesthetic" education.

Courtney: Yes, it has—although I'm never happy with labels.

McLaren: And in your books and lectures you frequently claim that if young people don't experience different styles of expressing emotional life, they may grow up emotionally retarded. What you are saying, if I interpret you correctly, is that children who do not experience all of the arts will leave our schools as emotional,

mental, and perhaps even moral eunuchs. Am I perhaps overstating your case?

Courtney: No, you're not overstating it. However, it isn't "my" case. It's really that of David Best, the English philosopher, and I've simply taken his case and extrapolated it. David's point is a very good and clear one. "Romeo and Juliet" is a play. It's an opera. It's a ballet. It's also the subject of a great many other works of art. What's the difference between "Romeo and Juliet" as a play and "Romeo and Juliet" as a ballet? Each is expressive of a different range of emotions. And if *each* of the arts is expressive of *different* emotions, then children who cannot experience expression in *all* of the arts are surely missing expression in *some* of the emotions. In other words, there is an intellectual point here (not a methodological one) which is that expression in each of the arts is absolutely necessary for emotional and aesthetic growth to take place.

McLaren: Well, as you know, one of my primary interests is in inner-city education, and you taught large groups of inner-city students in various places in England—with, I understand, considerable success. You started by working with individual students and building up profiles of their strengths and weaknesses. Next, you began to match forms of extension (which you refer to as "media") to their forms of expression (which you refer to as "masks" or "masking"). You tied this procedure into a unique theory of sign, icon, and symbol. Could you elaborate on this methodological procedure, please.

Courtney: Simply stated—and this is an over-simplified reply to your complex question—it is that I as a teacher attempt to "read" the needs of students at the level of symbolization. I ask: how is that best expressed, at the level of the media they are going to use? This becomes extremely difficult to explain in words, because each student is different. If I go through a particular routine with one student, that routine might apply only to *that* student. But I'll give you a practical example with one specific student.

This particular girl was twelve, I think, when I first worked with her. Jane was a bright child, but not particularly academic. She was interested *only* in performance, that is, musical performance, theatre performance, and dance performance. But her performance ability was less than it should have been, was inferior to her academic accomplishments, and this was due to a lack of background experience in the school system and in her home. She had a very severely deprived home. What I did was to "read" her expressive needs. She obviously required some kind of a performance expression that wasn't being satisfied. I provided a series of circumstances for her to fulfil her expressive needs; and as I continually watched what she was doing, I could open up doorways for her so that she could develop these needs through various media.

If I can jump forward to the time when Jane was seventeen, her performance was far ahead even of her academic work, and her academic work was excellent. I was at that time doing an improvised production of *Peer Gynt* in the city in which she lived. Jane came to play Aase, Peer's mother. A very famous British actress happened to come to the private performance and said to me that, as far as she was concerned, Jane was the greatest Aase she'd ever seen.

McLaren: Really?

Courtney: Eventually Jane became a teacher—and a very good one, too. Now the point of this anecdote is simply that the expressive needs of the individual are primary needs that have got to be fulfilled. The teacher has got to be sensitive to what those needs are, attempt to fulfil them, and then the type of media that's necessary will emerge. The age level will influence whether this is in icon, symbol or sign. My question in Jane's instance was: Is it theatre? Is it dance? Is it music? Or general performance? I eventually came to the conclusion that for Jane it was theatre. With students other than Jane (who was a very particular instance), the teacher's questions are different. If this student cannot read, for example, what kinds of prior needs in symbolization does he or she express? These are vital questions for all teachers. But I don't know if that answers your question.

McLaren: It does, but it poses another. Your work draws on a number of seminal thinkers—names such as Wittgenstein, Erving Goffman, Hugh Duncan, Victor Turner, E. J. Burton, D. W. Winnicott, Lyman and Scott, and Richard Schechner come to mind. How could a classroom instructor, unfamiliar with these thinkers, virtually unskilled or untrained in acting or improvisation, feel comfortable using the dramatic curriculum that you advocate? You must get this kind of question an awful lot.

Courtney: Yes. I find it a non-question. In the first place, those of us who are "leaders in drama education" have never had any drama education in our lives. I'm thinking now of Peter Slade, Brian Way, Jim Burton, myself, and so on. None of us ever took courses in these things, but we had rich experience. The essential part of my approach is that of being a practising teacher who is concerned with what is actually happening to *this* student—that's number one. There's a lot of information from many different sources (some of which you've mentioned) which is of use to me as a teacher. I can't know all this at any one time. I can never know it all—there's always new information day by day. But provided I constantly keep up with the different kinds of experiences and readings which are the necessary background, it's just a question of using what I've got efficiently.

I know from my long experience of training teachers that *a few* can go into schools on their first teaching practice with no experience at all and little academic background and still be fine teachers. They may be better teachers if they know the sources, of course, but the teaching quality is still high. Teaching is a question of continuous learning.

I'd also remind you of Brian Way's statement that good drama teachers normally start by doing five minutes of drama at any one time and then stop, because drama is not the easiest thing in the world to teach. One needs continuous experience, slowly increasing the amount of time, in order to be able to cope with it. I don't think book knowledge as such is of primary importance to the act of teaching. I think it's one's attitude to human beings which is fundamentally important.

McLaren: The reason I asked that question was that I remember taking an art therapy course with Dr. Martin Fisher, and I would say that half the class was terribly apprehensive at the start. We were there because we wanted to be there, but for some members of the group, there were stumbling blocks. "I'm not an artist; maybe I shouldn't be here. Maybe I should just go." And then we were told: "Hold on a second. Hold on. You don't have to be an artist to learn about art therapy." And once that was made clear at the outset, we all relaxed and really got into art therapy. So yes, my question may have been a non-question, but lack of background knowledge can be a stumbling block.

Courtney: You do not have to be an artist to teach art. It is true that some great artists were great teachers. It is also true that some were terrible teachers.

Let's put it this way. I think there are two extremes in approaches to teaching the arts. First, there is the mechanistic approach, which reached its height in the nineteenth century. Some people are still teaching like that—though less and less each year—and this approach predicates an objective body of knowledge to be imparted to students. My father, until he retired from school many years ago now, taught perspective to nine-year-olds because "that's how you teach art." There were "certain skills to teach."

But since the Einsteinian revolution, a totally different attitude to arts teaching (and not just arts teaching; I think to teaching as a whole) has been slowly permeating the system—namely, instead of being taught skills or specific *objective* knowledge, you start (to use Brian Way's phrase) *from where you are*. That is, if you're going to learn anything, you have to start from where you yourself are. If you try to teach me about advanced computers before I know the first thing about computers, I'm going to get lost. If you try and take someone who doesn't know the inside of a car through advanced mechanics first, they still won't understand the inside of a car. I say to graduate students when they come in, "You are who you are."

For example, I've just begun a class today. In there is a teacher of music with high musical qualifications and experience as a professional. I also have in there a student who is teaching grade one music and can just pick out things on the piano. Now we can say it's unfortunate that the grade one teacher hasn't better skills, but that isn't the issue. The issue is that this teacher can teach very well *provided* that she learns the skills necessary to operate; that she consciously builds up her own resources; and that she then allows the students to develop from where they are in music. So I'm saying that starting from where you *are* is a totally different kind of approach from starting from where someone thinks you *ought* to be.

McLaren: Right. Well, my own impression of the school system at times makes a rather depressing description. I'm referring to what I consider the bland, dreary impotency of everyday school rituals; the grinding, drudging familiarity; the unremitting banality of the subject matter; the unemotional and generalized stream of boring events; the bleak inevitability of sameness and invariance. . . .

Courtney: Ye gods, you're a pessimist!

McLaren: Or perhaps a realist. But what depresses me most is the anti-incarnational character of schooling. In other words, the body is treated as if it were a diseased organ that is only tolerated because it houses the brain. Now you've said that drama provides a unique form of knowledge. Just a moment ago, you talked about dramatic knowledge serving as a kind of integrative function, something to counter the top-heavy stress on abstraction and compartmentalization that we find in many of today's classrooms. Can you elaborate on this a little more?

Courtney: Yes. Apart from the primacy of embodied knowledge, I suppose there are two ways to answer this, Peter. One is in a purely practical sense, "what shall I do now?" The other is in the ideal sense, "What's the ideal situation?" Let me deal with the second one first.

An ideal situation, it seems to me, is to ask students what they wish to learn. Now I don't mean that you should necessarily ask them directly, in words, because students can't always respond to that kind of honesty in our present school systems. What I mean is that you should seek to "read" students, to ask yourself as a teacher what are the students' needs and attempt to satisfy those needs. A teacher makes mistakes, but always you must *try* to "read" their needs.

McLaren: Right.

Courtney: Immediately you do that, then the compartmentalization in the secondary school will break down. There was a fine school—Campbell River High School on Vancouver Island—where for many years the principal John Young did precisely that. Students chose what they were going to do at any time throughout the day. They could choose to walk into, say, grade 11 social studies; but if they walked into it, they had to behave like students would do in the formal classroom, because that was how it was going to be taught. They didn't *have* to walk in though. They could choose not to. They could walk into the library; but if they walked into the library, they had to be silent. Students could go through any grade and sit the examinations in any length of time. So a student could take grade 10 one month, and grade 11 the next, and grade 12 the next. Or there could be two years between two grades. There were these kinds of choices. When I met up with some of those students at the University of Victoria, they were among the very best coming out of the schools of British Columbia. It was an extraordinary group of kids. Unfortunately, certain conservative and mechanistic forces in British Columbia eventually fired John Young. But then, British Columbia is always swinging from one side to the other.

Ideally, what do I do . . .? It depends on *who I am*. If I am a grade 8, 9 social studies teacher, what I try to do is to break down categorical knowledge within that particular classroom.

I taught social studies in England for many years. At one point I was teaching Elizabethan history. What I did *not* do was to lecture to the students on Elizabethan history. What we did first was to find out what it was like to live in Elizabethan England—that is, we discussed what we knew about Elizabethan England. And maybe what we discussed wasn't accurate. I would question somebody about living in an Elizabethan house. Perhaps the house he described was modern, only twenty years old. So how could he know what kind of houses Elizabethans lived in? Off he went to find out how people lived—from books, from movies, from television, and (since we were in Britain) from visiting an Elizabethan house. Then he came back and talked about what he had found—and, if necessary, improvised about it in order to discover how people operated in such

houses. I really lived in a Tudor house for many years, and a Tudor house is a very particular place to be. For instance, you've got to watch your head every time you go through the door, because the doors are so low. Now, unless you actually improvise that—or go to the house and really do it—you don't experience it.

So what's happening is a kind of whole learning. It's a living learning. You are living Elizabethan England. You discover what it's like to receive the news about the Armada. You discover what it's like when Queen Elizabeth arrives in your village or whatever. Reading, information, and so forth about these things come as a result of the students' deep motivation to learn about the things that they are improvising.

One of the arguments against this, of course, is that it sounds very much like the old "project method." It's not. I shall never forget my daughter coming home from school when she was nine years old, and I asked, "What did you do at school today?" She said, "Oil." I said, "Oil?" And she said, "Yes, Dad. Can't your students do anything else but projects in oil!" And the point is, simply, that the student teacher concerned had misunderstood what was involved—that is, she hadn't "read" the children and said to herself "What are the needs of these kids?" She'd taken the idea that "Oil" was a good thing on which to centre all activity in a classroom as a project. This is just as bad as instructing children in objective knowledge for which they have no use.

McLaren: That brings me to another question. It's been argued that the Hall-Dennis years gave the opportunity for the arts-minded educators to show what they could do.

Courtney: Oh well, of course, that's not entirely true.

McLaren: I agree. Nevertheless a lot of people tell me that during the Hall-Dennis era, the reading scores dropped, the students' behavior grew deplorable. Surely you've heard the same sort of thing?

Courtney: Yes—though I'm always suspicious of measurement studies unless I know exactly what has been measured.

McLaren: Then how do you react to the widespread opinion that a curriculum for the arts will lead to wild-eyed, undisciplined, and illiterate rebels running amok in our classrooms?

Courtney: I think it's one of the funniest things I've ever heard!

McLaren: Despite its hilarity, people continue to believe it.

Courtney: I'd remind you about Ancient Greece. What do we know about Ancient Greece? We know the incredible architecture, the art, the great plays and so on. That was a culture which, despite its faults (slavery, treatment of women, and so on), was incredibly prolific in terms of artistic and aesthetic experiences and as a result it became a great culture. We know that culture will be remembered for its artistic artifacts. But how will the future judge twentieth-century Canada? Will it judge us for our artifacts? For the Toronto Dominion Centre? The CN Tower? How is it going to judge us? ... Sorry, I've forgotten the question.

McLaren: Hall-Dennis, and the accusation that ...

Courtney: Oh yes. The problem with Hall-Dennis was that it was not properly prepared for. There are things about the Hall-Dennis years which I admire, things which I don't admire. A thing I don't admire is that arts teachers were not *prepared* for doing the job *well*. Many of them did a lot of good work, but many of them did not. But the pendulum swings, does it not? We abandoned Hall-Dennis; we're now into "back to the basics"' and accountability; and five years down the line there will be another swing. The sooner we stop swinging about and stabilize by trying to understand kids, the better education is going to be.

To teach the arts, unless one is a highly experienced teacher, requires a certain amount of bravery. You've got to stand up and be counted. For instance, in drama students will make noise, and the teacher next door may object to that noise. That requires a little bit of bravery on the part of the drama teacher, to cope with the noise problem. There are various ways of coping aside from hitting all of the children over the head and telling them to be quiet!

Dorothy Heathcote has a series of teacher "thresholds" which are absolutely necessary, it seems to me, for all teachers to understand. One of them is noise. Each teacher has his or her own noise threshold. When I'm with a group of improvising teenagers, I can take almost any quantity of noise. Another drama teacher, who may be as good or as bad as I am, can only take, say, 50 percent of the noise that I can take. In other words, as there are differences for students, so there are differences for teachers. One of the things that's often forgotten is that the teacher's needs are of almost equal importance to those of the students. A teacher who is at all nervous, who is worried, should obviously not go into a drama class and let the balloon go up.

The same thing applies to space. For instance, I'm quite happy sitting on the floor amongst a group of fourteen teenagers sitting all round me. Now some teachers can't cope with that. Some teachers need to be distanced from kids. They should acknowledge the fact that that's who they are.

In other words, if we start from where we are as kids, then we start from where we are as teachers. And teachers should be a little bit more brave and attempt to teach *their* way, not according to some kind of abstract rule.

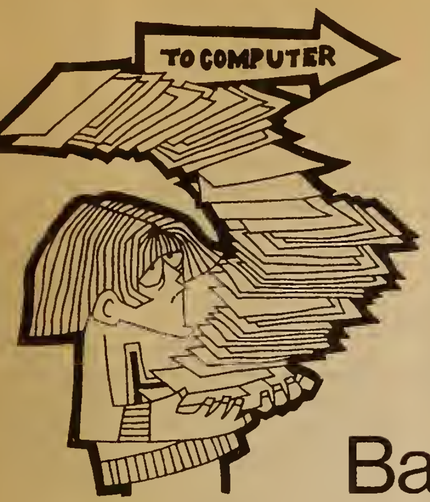
McLaren: In North York they've now got Claude Watson School for the Arts. What's your reaction to schools for the arts?

Courtney: There are a number of these schools mushrooming in Ontario, and elsewhere, and this may be as a result of two unfortunate things. One is the television program "Fame," which has suddenly made things look more rosy for high schools of the arts. And the other is because it may be a way for school boards to save money.

I think we must be very careful with the high schools for the arts. There is nothing wrong with such a school provided it is properly planned and thought through in relation to the local community.

The fundamental problem is that there are two kinds of necessary arts curriculum: the arts curriculum for everybody, and the arts curriculum for the few who are highly skilled. Provided the board ensures that every school under the board's jurisdiction has a good general arts curriculum, there is nothing wrong with spending money on a high school for the arts.

Then again, when you look at the internal issues of the high school for the arts, the real question that the board has to answer is, "Can we find *the really high calibre teachers* to teach in these schools?" And here, I think, it is questionable whether some of the new institutions are really doing service to the students they have. I'm not saying that these schools should be disbanded; I'm saying that one has to be very, very careful how one sets them up. Great care must be taken. The job should be done properly or not at all. If you've got a junior Glenn Gould in your locality, obviously a brilliant piano teacher is absolutely vital for that student, and that student's needs must be met. But how many Glenn Goulds do we have? How many Maureen Foresters do we have? How many Kate Nelligans do we have? We have to be very careful that all the students who go to these schools for the arts are not going to be terribly disappointed when they don't become the next Lorne Greene or Karen Kain of Canada. With this kind of proviso, I greatly support schools for the arts. ☐



THE INFORMATION REVOLUTION

Background and Implications

A.R.Wells, *Director of Education, Lambton County Board*

"The theme of your convention—Responses to the Realities of the Eighties—is certainly relevant. My first response to the realities of the Eighties is that the future is no longer what it used to be."

The speaker was the Honorable Bette Stephenson, Minister of Education. The occasion was the C.E.A. Conference in Toronto, September 29, 1982.

"The futurists . . . have been telling us for some time now that we are in the post-industrial age. Agriculture and manufacturing are sinking as the foundations of our economy. Nor should we rely as heavily as we have in the past on a resource-based economy.

" . . . our economy and our realities will be based on information, intelligence and imagination. Knowledge will be the economic foundation of our society. Already a new set of knowledge industries are on the rise and I suspect that they will be the economic foundation of our society.

" . . . our economies . . . will be based on information . . . strategic planning process . . . Einsteinian curriculum . . . reservations about well-worn assumptions . . . at a crossroads."

The words flew by. I heard, but I did not comprehend. I felt very uncomfortable.

Precedents

That uncomfortable feeling has motivated study and reading, conversation and thought since that conference. A flood of newspaper and magazine headlines crossed my desk, appearing to have a bearing on the topic. Through it all, the words "Information Revolution," "Information Society," and "Information Age" continued to puzzle. "What on earth is an "information society"?

About twenty-five years ago, two other words emerged which I did not understand: they were "New Math." From those two words, the massive curriculum changes later developed that led to the New Biology, the Robarts Plan, the Credit System . . . the whole attitude that school-curricula needed changing in fundamental ways. In the beginning, "New Math" was something most Canadian educators wrote in quotation marks. Sooner or later, with ease or with difficulty, it became a topic we all had to understand to survive.

Hundreds of years before the lesson taught by the New Mathematics, however, there was a much more sinister lesson. While it was first learned by the Micmac Indians, it has become part of the folk tales of other Indian tribes right out to the edge of the Rockies and, for all I know, to the Pacific Coast.

A Micmac maiden had a dream. In her dream, she saw an island, covered with tall trees, approaching her shore. Hanging from the trees were bears. Seeking an explanation, she told her dream to the village shamans. They consulted among each other, but could offer no interpretation. The moving island, the tall trees, the bears — all remained a mystery, until that fateful morning when, looking out to sea, they saw the European ship, its tall, tree-like masts and the white sailors hanging like bears from the rigging, establishing the first contact between the two cultures. Looking back, the shamans understood why they were not able to interpret the vision of the maiden. Their powers of interpretation extended to the depths of their own culture. Faced with a new society, nothing from their past could throw light upon it or tell where it would lead.

We have been warned that an information society is approaching. Investing those words with meaning is a task which faces every trustee, every teacher, and every maturing student.

What is the Information Revolution?

If you look up "Information Revolution" in the card catalogue of the average small city library, you may find no entries. If you are fortunate, you may find one comprehensive reference—"The Information Revolution and its Implications for Canada," written in November 1980, by Shirley Serafini and Michel Andrieu for the Communications Economics Branch of the Federal Department of Communications. It is from that book that the majority of information found in this article is drawn. One of the first rules of research, however, is to avoid drawing from a single source. To expand references in this area requires moving to the rapidly expanding list of computer magazines, to the financial pages of newspapers, and even to the suggestions and inspirations of science-fiction.

There has been a marriage of communications and computing technology since the Second World War. Cost and size of computers have decreased. Flexibility has increased. Networks of cooperating organizations have emerged. Innovations have succeeded each other rapidly, and new technology is diffusing through the economy at such a pace that fundamental changes have now started to occur. The speed of the development and the magnitude of the resulting change have caused the phenomenon to be termed the "Information Revolution."

Old industries have been pushed aside. The Swiss watchmaking industry is dead. There are world-wide upheavals in the printing trades. New industries, producing and employing new technologies, emerge daily. Countries adopt these new technologies at different rates, resulting in shifts in international competitive strengths. The social and economic impacts of the Information Revolution are likely to be as profound as were those of the Industrial Revolution. Unless there are comprehensive approaches to policy, the results may be overwhelming, even to whole countries.

Although it may be hard to visualize an "information worker," there are over 120 different occupations so classified in Canada, some of them having existed for decades. A summary of the classification system adopted in the Department of Communications' book helps make these jobs become concrete.

Information Producers

SCIENTIFIC AND TECHNICAL—Chemists, Physicists, Engineers, Statisticians . . . (18 categories).
MARKET RESEARCH AND CO-ORDINATION SPECIALISTS—Brokers, Purchasing Agents . . . (6 categories).
INFORMATION GATHERERS—Surveyors, Inspectors, Work Study Specialists . . . (12 categories).
CONSULTATIVE SERVICES—Architects, Draftsmen, Medical Technicians, Barristers, Dieticians . . . (12 classes).
INFORMATION PRODUCERS—Authors and Composers.

Information Processors

ADMINISTRATIVE AND MANAGERIAL—Judges, Managers . . . (9 categories).
PROCESS CONTROL AND SUPERVISING—Dispatchers, Navigators, Clerks, Supervisors, Foremen . . . (12 categories).
CLERICAL AND RELATED—Stenographers, Bookkeepers, Accountants, Clerks, Proof Readers . . . (16 categories).

Information Distributors

EDUCATORS—University Professors, Primary Teachers . . . (5 categories).
COMMUNICATION WORKERS—Journalists, Stage Directors, Television Producers . . . (7 categories).

Information Infrastructure Occupations

INFORMATION MACHINE WORKERS—Photographers, Pressmen, Office Machine Operators, Engravers, Sound and Vision Equipment Operators . . . (15 categories).
POSTAL AND TELECOMMUNICATIONS—Broadcasters, Postmen, Telephone Operators . . . (6 classes).

The Canadian Situation

In Canada and the United States, the proportion of people in the work force occupying these information jobs has now risen to about 40 percent. To a lesser degree, but at about the same rate, the same increase has been observable in all industrialized countries.

This suggests that the Information Revolution is unavoidable, as was the Industrial Revolution. The objectives of public policy should be not to prevent the revolution from occurring but to turn it to our advantage. Simplistic solutions—such as establishing high tariff walls and avoiding external competition—are echoes of past reactions: the drive of the fur-traders to avoid colonists; the battles of the open plains cowboys against settlers with fences. It is a reaction without historic promise.

Canadians are not divided evenly among the various classes of information workers. At the moment, 63 percent are information processors, 19 percent are information producers, 12 percent are information distributors, and 6 percent are occupied in the information infrastructure. Between 1931 and 1971, all of these occupations grew much more rapidly than did other occupations. Information processors, for example, increased from about five hundred thousand to about two million.

Not all occupations are equally heavily devoted to information work. Finance, insurance, and real estate are almost entirely informational. Government services and industry are about half informational. Construction, agriculture, forestry, fishing, and trapping are only 10 percent to 25 percent informational. *Almost all of the new jobs created since 1931 have been in the information industries, and there is reason to believe that this trend cannot continue.*

We have been able to provide a mass of information jobs because of the minimal capital investment for such workers. It requires $2,500 in "machinery" to back up a typical office worker as opposed to $25,000 to support each factory worker.

The growth of the information industries has been accompanied by a lowering of average output. Surplus manpower has been absorbed by the manual workers in information processing. With coming technological changes, that source of employment could disappear at a rate akin to a collapse.

The outlook is not clear. It is possible that a vastly increased demand for information will balance the vast improvements in technology. The energy shortage may heighten the trend toward a conserver society. Intercommunications may replace travel. This is the happy scenario, maintaining a world not too dissimilar from the one we know.

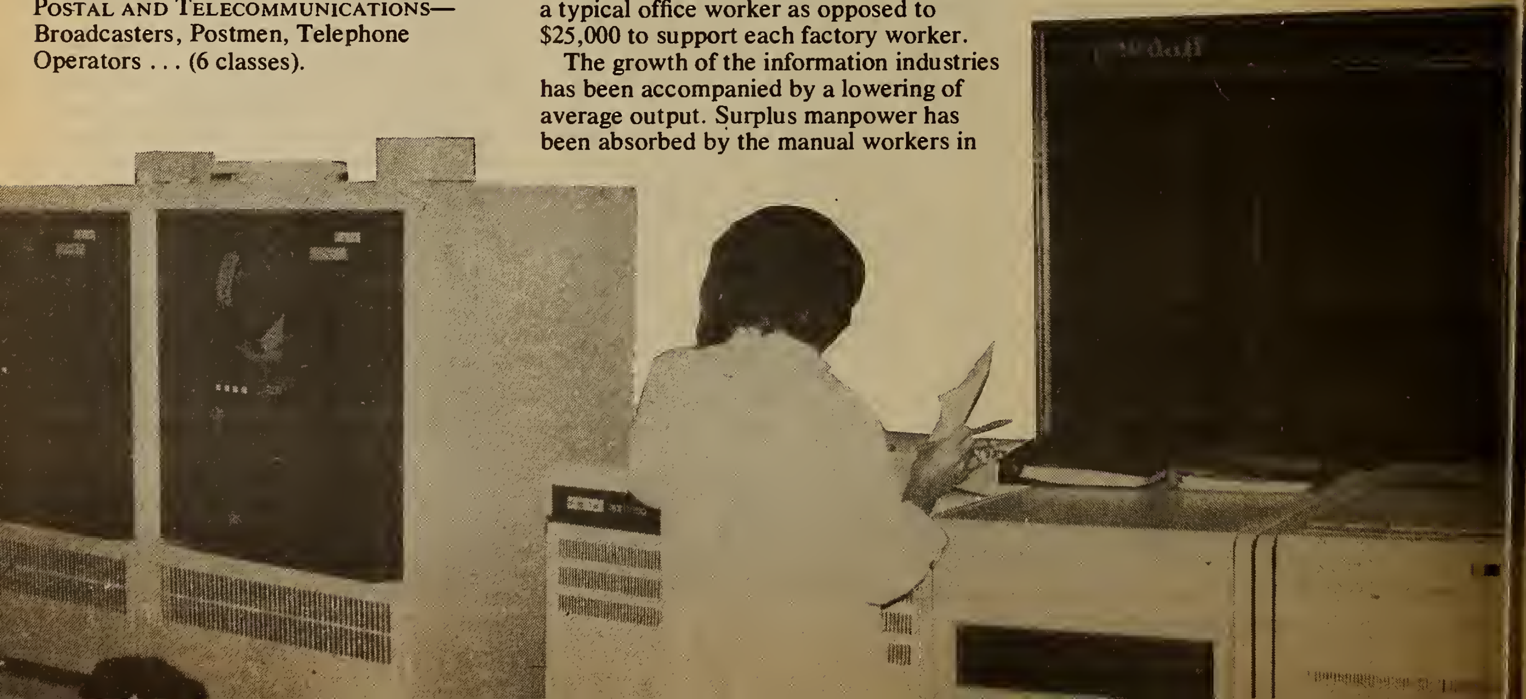
There is reason for concern, however, that the growth in information employment will taper off in the near future. Such a development would have serious implications for overall employment and the variety of ways in which Canadians are able to earn a living.

Because the outlook is not clear, we cannot make solid long-range plans. Because of the ominous possibilities, we must monitor continuously.

Impact on Communications and Manufacture

The Information Revolution has several components. It involves an extraordinary evolution and diffusion of information technology. It involves the putting together of computing and communications technologies into a single powerful system, with vast capabilities for computation, analysis, and access to enormous amounts of information. Each new generation of computers (as I understand it, we are on the fifth) has produced an incredible drop in cost/performance ratios. In 1965, there were 1000 computers in Canada. In 1979, there were 37,000. I suspect that the number now in use, if the figures were available, would be astonishing.

Computers work at their maximum when they are interconnected to form a network. Recent major developments in communications technology include fibre optics, satellite technology, and digital transmission and switching. By some miracle, Canada has been a world leader in all these

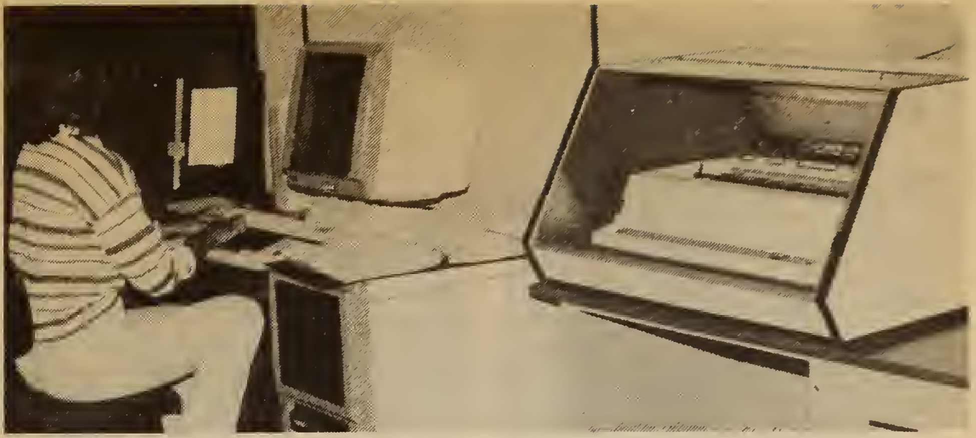


fields. The source of the miracle may be our geographic isolation—Canada was also a world leader, in the last century, in telephone and telegraph networks. For whatever reasons, if we had the computers and the understanding to employ them, we would have the ability to network them more than do most other countries.

The introduction of information technology can have sweeping effects on production methodology. More than half of the changes taking place in Canadian industry in recent years are computer related.

In a Computer Aided Design/Computer Aided Manufacturing (CAD/CAM) factory, computer graphics are used for the design and drafting of a product, with the design held in computer memory rather than in drawings or blueprints. Canadian teachers experienced the new technology when visiting Germany on the Ministry-sponsored seminar this spring. Brought back to Sarnia, Computer Assisted Design is a Lambton County reality, probably being replicated in other parts of Ontario. Nonetheless, while Germany has abandoned apprenticeships in drafting, students all across Ontario continue to be enrolled in this subject. The abolition of drafting positions is only a beginning. The CAD/CAM factory also has computer-generated parts lists, vendor ordering, production scheduling, and inventory control. Computer-controlled stacking cranes offer automatic movement of materials, assembly areas employ robotics, and computers control machine tools and inspection and automatic test equipment. By 1995, full plants may be operated by a central computer. General Motors sees computer control of 90 percent of the operation of all new machines in manufacturing and assembly plants. Each new innovation makes possible other innovations; sewing machines, microwave ovens, and automobiles have all introduced micro-processors into their operation—either to replace old components or to perform new functions.

There is always a chance that forecasts of computer-operated factories are too visionary—like domed cities, rocket transmission of persons and information between continents, and other forecasts of the future which have yet to come to pass. But it would not be wise to bet on that chance.



In the English midlands this summer, I heard stories, in tones of awe, of the robotized Fiat plant which had been recently built. A visitor at my home at Christmas told of the reduction in manpower in the Chemical Valley Plants, from his beginning days, not long ago, when thirty men kept an eye on brass gauges to the present time when the same shift work is done by seven men. Britain looks, overall, to an unemployment rate growing from the present 1.5 million to over 5 million before planned or hoped-for events produce a turn-around—not because of reduced demand or production but because of reduced manpower needs in changed methods of production. Germany, France, Japan, Sweden, all have produced national schemes to deal with technological change. Korea, Spain, Central America, and Ireland—countries with little traditional industry—may become the major trading nations as they begin, unhindered, to employ the new technology.

Some General Implications

How will our lives be affected by the Information Revolution? Some concerns are already clear.

There is an erosion of national sovereignty. The same motivation that caused France to build the "Normandie" at the height of the depression has caused her to develop independent computer technology. The French Government became concerned that it could no longer maintain an independent stance without an independent computer framework. Sweden has abandoned the goal of complete independence, but is working rapidly to decentralize computer implementation.

There is a vulnerability if the new systems ever fail. We remember the blackout when the New York State power grid collapsed. Quebec recently made headlines with a similar blackout. A totally computerized country is a very vulnerable country, open to natural and man-made disasters.

Joblessness is a very, very sobering concern. There is no more reason to assume that workers displaced by the computer will be reabsorbed into computer-support industries than there was that all the dray horses would be reabsorbed into the trucking industry. Canadian history was affected by the Highland Clearances, when useless humans were removed from the mountains of central Scotland in favor of sheep. Those persons ended up in Canada and Australia, where survival was only possible in conditions of extreme hardship formerly reserved for exiles and criminals. The Luddite reaction to the Industrial Revolution, when textile workers in Nottinghamshire smashed the mechanized looms and spinning machines that were replacing them, is one to be expected, and feared.

Doing nothing is a simple and attractive course of action. If Canada does nothing and never overcomes the very real obstacles to the introduction of technology, our goods will become uncompetitive. Most of the ways of introducing the new technology—foreign direct investment, licencing of foreign firms, nationalization of foreign firms, investing in overseas industries—have terrible consequences for national survival.

A small number of multinational companies dominate the computer world. Their activities can have a profound effect on trade balances and the international division of labor, with no national direction or government control.

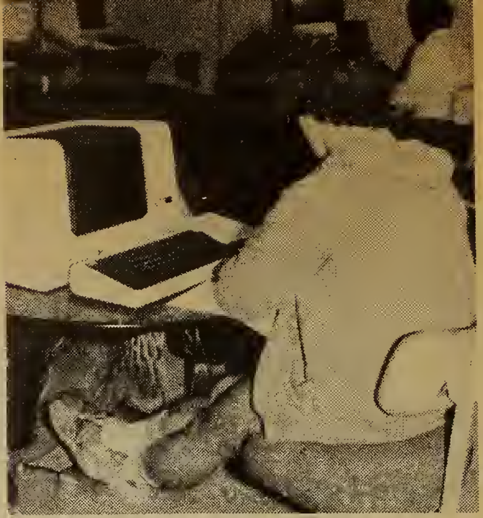
We may be bankrupted by an invisible trade—the trade in computer software. The balance of this trade could destroy our economic base before we even begin to gather data about it.

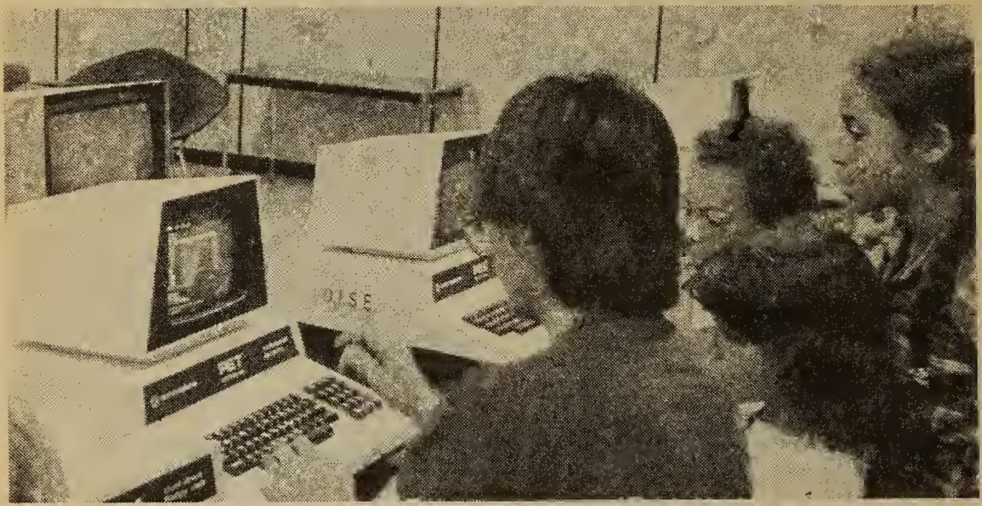
The Information Revolution produces threats to personal privacy and civil liberty. Sweden has already made individual monitoring by computers illegal. Errors in output, personal reading habits . . . almost every aspect of our daily life will be susceptible to public knowledge; to private or Government blackmail and control.

The possibility of instant survey and continuous referenda will lead to the growth of Electropolitics—an unhealthy suppression of alternatives which, at the time of the City States, when it was last possible, produced remarkably depressing systems of government.

Although Canada has a strong communications infrastructure and a well-schooled population, it has been weak in exploiting the new technology. The experience of other countries shows that there are many political and economic tools available for use in supporting national industry. (These are detailed in the Department of Communications' book.)

Gordon Thompson, of Bell-Northern Research, discusses this national weakness: "Innovative applications of information technology have significant high-order impacts. *While they are wealth-creating, transformative and socially beneficial, they seem to be constrained from occurring.* Our centuries-old experience with the trade of hard goods, our dedication to industrial technology *and our poor understanding of*





wealth creation seem to be among the constraints."

Thompson likens modern-day skeptics of the Information Revolution to the physiocrats who argued 200 years ago that only in husbandry (agriculture) did positive effort produce a surplus over cost. In their view, "wealth creation was the sole prerogative of husbandry." In the same manner, he argues, *their descendants perceive that wealth creation depends on physical exchangeables.*

To this point, this article has sought to achieve the following:

1. To clarify, by definition and example, the meaning of such terms as Information Revolution and Information Society. These words will be used with greater and greater frequency in the public press over the next few years. Not to grasp their meaning is to be effectively illiterate in the 1980s and beyond.

2. To suggest that some of the consequences of the Information Revolution can be as destructive and cruel as are those of any other revolution, although the opportunity for growth is correspondingly present.

3. To suggest that the Information Revolution is inevitable. This is an arguable conclusion; but the rapidity with which we arrive at such a conclusion may affect the future of our country as an independent political creation.

Education Implications

Clearly the conclusions posed above are in the realm of public political action, and are not dependent upon education at all. Has the Information Revolution, then, no effect on the operation of our schools?

In fact, there are many implications for schools, and I conclude by suggesting some areas where we must all work to respond to a challenge which could either overwhelm us or uplift us according to its resolution and our resolve.

1. All of us, in our reading, can be sensitive to the words "Information Society" and the related family of phrases. We are moving into a new world. We must move with caution but not procrastination; with concern but not abandoned terror. The world will unfold swiftly. We must all be alert.

2. We must be prepared to update career planning. It was uncertainty about traditional jobs that encouraged Horace Mann, Egerton Ryerson, and other educational reformers to revolutionize our education system at the end of the last century. They broadened the curriculum to replace the apprenticeship system of preparation for work that had preceded the Industrial Revolution. A call for a return to the basics is almost certainly a call to disaster. Renewed preparation for a world which has passed is not a sensible reaction. We need to maintain breadth in learning.

3. We need to really concentrate on the general education role of schools—certainly for the general student, who is faced with the imposition of compulsory credits in subjects that are almost certainly out-of-date, and probably for every student, preparing for a future that is largely unknown.

4. Adult education and training will become of vital importance. Boards of education should work closely with nearby community colleges and other learning agencies. Adult education tends to be only a minor concern for boards of education, but it is of tremendous concern for Canada. We should quickly determine exactly where our future lies.

5. Teachers should do everything in their power to make students aware of the present world. This is already being done by many teachers in many subject areas. A recognition of the almost-crisis nature of our economic position could be communicated to politically active adults through school assignments. Ecological concerns became of consequence to adults through the actions of young adults. We may save irreplaceable time in this way.

6. Teachers must encourage students to develop higher order thinking skills: evaluation and analysis, critical thinking, problem solving, synthesis, decision-making, communications, and creativity. Our schools are, astonishingly, more adept at teaching these skills today than they were even ten years ago. There can be no slacking of the effort.

7. Students must be encouraged to investigate some very sensitive topics: the continuation of a national identity; the conflict between public and private goals; and methods of sharing work or the fruits of work. Some of the potentials for the future, particularly genetic engineering, have moral implications. Students are interested, but discussions must be worked into the limited time available for schooling. In the world of the future, attitudes will continue to be as important as knowledge and skills. There will, however, be *future* attitudes, fitting for their time but conceivably repugnant to us.

8. Everyone must be involved. We are faced with difficult tasks, with an uncertain future, with largely unknown goals. Because we live in a democracy, we can make our own future, but only as long as the democracy can be maintained. Participation by trustees, students, parents, administrators, teachers, and ratepayers will be necessary to carry us to the promise of the Information Society, which lies over the horizon of its threatening present. □

Note: This article is based on a report by the author to the Lambton County Board of Education.

"May There Be Enough for Their Children"

(Psalm 17)

Otto Weininger, *OISE*

Sometimes I think of schools as weather vanes that quickly change direction as the winds of educational and social change gust rather unpredictably about them. Fifty years ago this was not the case; both curricula and teaching methods were time-honored and relatively resistant to change. But in the years following the depression, as society began to redesign itself into a more urban and mobile population, schools underwent great changes too. Indeed, I think it likely they have changed—and more often— in the last twenty years than they did in the previous one hundred. The open plan schools built ten years ago, and in many cases rebuilt within five years into semi-walled environments, are an obvious example.

Where the impetus for change comes from is often unclear. Is it educational theorists, administrators, the community at large, parents, teachers, or students? More likely it is a combination of individuals from within each of these groups who happen to be able to articulate a general concern or unease. If they express themselves loudly enough, a media wave or mini-fad traverses whole school systems, to die when it becomes impractical or when community reaction proves unfavorable.

One clear conclusion can be drawn: if we want a sounder educational system, we must clearly evaluate what we *have* and, equally clearly, decide what we *want* in terms of results. We must then tailor the buildings, the curriculum, and the methods to fit the goals we have decided upon. To do otherwise will simply lead us to repeat the expensive and too often psychologically damaging mistakes of the past two decades—change first, think later—at a time when financial resources and public patience are shrinking and the needs of a much more diverse and often more pressured population of children are growing.

Certainly one of the most critical needs for planning lies in education. Many changes have already been forced on the schools by necessity. There are now fewer students overall, and more working mothers, economic cutbacks, family break-ups, and non-English-speaking children. There is also now a push to introduce early education in basic skills, more bilingual programs, and the computer; each social, economic, and technological shift seems to influence our thoughts about schooling, our plans for the students. I often find myself wanting to stand up and shout "Wait! Is this what we really *want* for our kids?" But the answer is self-evident. We are up against a reality that must be coped with. Society is changing, and education must change with it.

How It Might Be

My vision of what early childhood education should be is one perhaps possible only in a society where children are truly valued, nourished, and nurtured with the best, and most enlightened care at home; and a society in which schools provide a leisurely, curious, supportive environment wherein small classroom groups are taught by dedicated, knowledgeable, warm, and stimulating teachers who have been trained to function effectively in such an environment. A pipe dream? Perhaps. But it is a vision too important to give up; for just as certainly as the schools are moulded by the society around them, schools in turn mould society. The adults produced by the system will change their world to fit the values and needs they acquired from their experiences in their homes and schools.

The suggestions I make here are not radical, but they do involve some change in priorities and policies. They begin with the idea that a small child needs a chance to develop in his or her own way and at his or her own speed—preferably at home, but if in schools, then let it be done in small groups where the emphasis is on play as the child's most important means of learning about the world. Since very early day-care is an essential for many families, let us try to personalize it: smaller centres, perhaps even kitchen nurseries with only three to five children, and well-trained staff who have the desire and time to talk with children, listen to them, and ask them the kinds of questions which encourage language development and curiosity, and who help them to develop ethics and values through one-to-one relationships, as should happen at home.

Equally important is providing young people with more effective training in child development and parenting. This cannot be left, I think, to voluntary classes for people who are already parents and who have the evenings, the babysitters, and the energy to take courses. Child development and parenting should be taught in the early

years of high school. A knowledge of these subjects is certainly as important to the development of young adults as a knowledge of basic economics and income tax law. The only way to break the cycle of poor parenting is to intercept those children whose childhoods were unstable or unhappy and consciously teach them other methods before they have children themselves and unconsciously repeat the errors of their own upbringing.

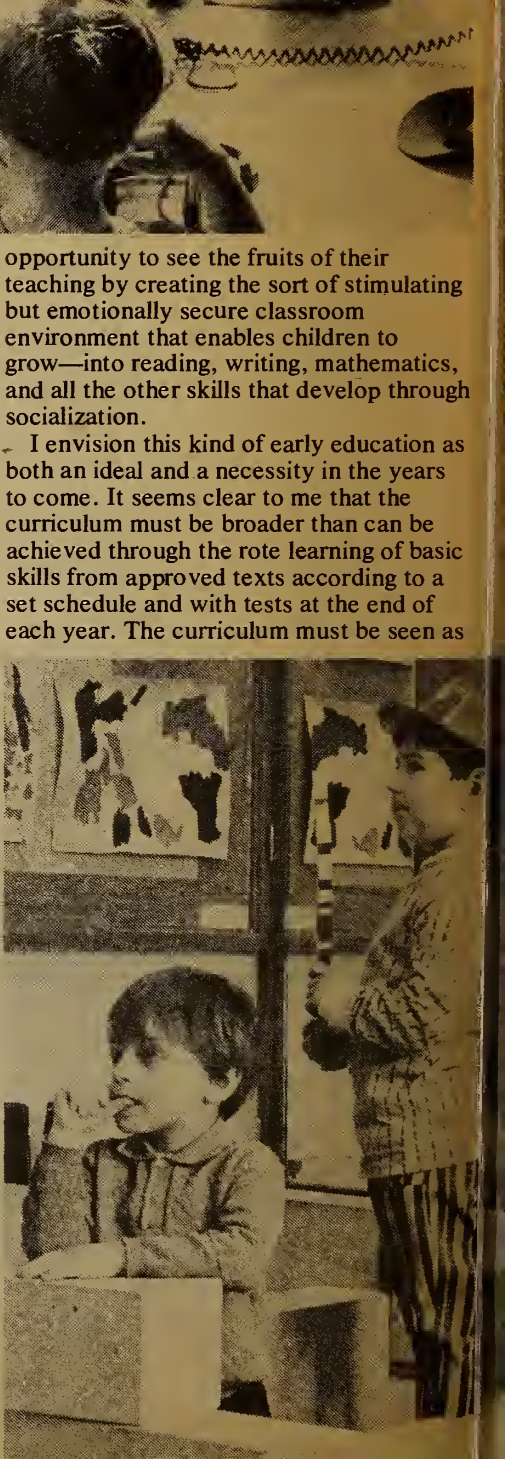
If children must begin school at four, let us *not* begin formal academic education right away. Let us instead recognize that children learn best through sociodramatic play, both alone and with other children. In playing with sand, water, blocks, toys, and other children, they explore their environment and learn from it most of the important concepts about the way the world works. As they act out situations they have experienced or imagined and try to make sense of them, they learn to distinguish fantasy from reality and to impose an order which helps to organize their perception—and they learn to unlearn and re-form these schemas when they prove to be inadequate. They develop muscle control and coordination. They learn to cooperate and share with other children.

Let us also build on the child's natural way of learning by not segmenting the early school years. An ongoing program which begins with school entry and lasts until the end of the traditional grade 3 might be ideal. By the end of that time, we could reasonably expect all children, regardless of the speed or timing with which they learned, to be able to read, write, do math, know about their culture and country, and to have developed oral language skills and an interest in investigating the world around them.

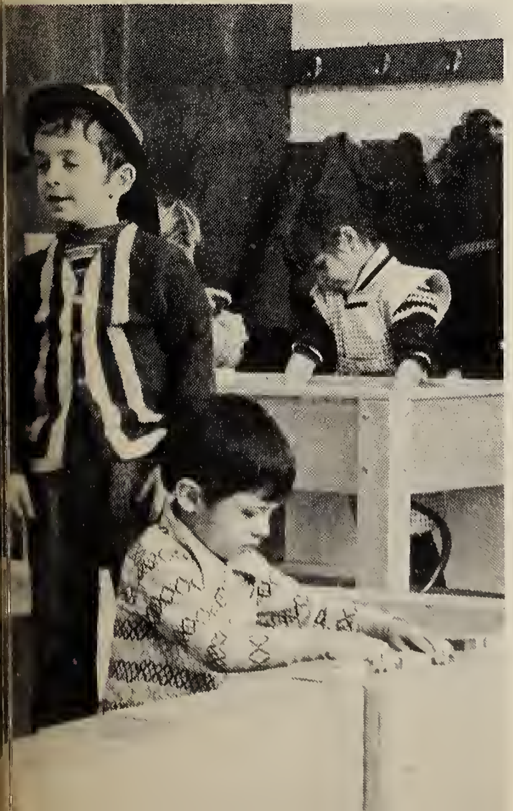
Further, during these first school years, let us avoid breaking the day up into the convenient adult-size chunks which have filtered down to primary classrooms from the high school and college levels. The idea of fifteen minutes for art, half an hour for recess, twenty minutes for reading, and so forth is foreign to the nature of the younger child and to the nature of the world the child must learn about. Children can learn far more from a morning's adventure spent in a field exploring the plants, rocks, insects, animals, and so forth, asking and being asked questions which encourage them to stretch their investigating and exploring and think in new ways—especially if this is followed up with, for example, a story about the outdoors read together under the trees, a snack of the edible plants which grow around them, and a chance to respond individually to the morning's experiences with a picture, a collage, a map showing directions and distances, a poem, a song, a scrapbook, a composition, reading, or a play. Such activities do cover the "content" of the curriculum, but the content has been organized by the teacher in a way which makes learning it a memorable and stimulating experience not possible to achieve in chopped-up periods.

If a group of thirty children, ranging in age from four to eight, spent their time with the same two teachers, there would be less need for testing. During those five years, the teachers would have ample time to observe, talk with, and discuss the interests and problems of the individual children. The younger children would learn from the older children. The teachers' relationships with the parents would be stronger, and the parents would be less defensive if their child seemed in need of extra help. The teachers' bonds with the children would be not unlike those of close family friends or relatives, and could provide a real source of strength in the event of trouble or breakdown in the family. Children with learning problems would not need to be segregated, because the acceptable range of skills being taught would be wide, and IQ tests and other measures would seldom be necessary, because teachers would have a long time to observe a relatively small number of children and identify their problems. Instead of segregating younger children into different classes according to their age and achievement, a resource bank of specialized teachers and consultants should be available to observe and help teachers find the best way to help individual children in their care. All these measures would do much to reduce teacher burnout, for teachers would have not only resources to draw on for special assistance but also a lower turnover of children each year, a smaller number to work with, closer relationships with the parents, more time to plan and evaluate, and, especially, more opportunity to see the fruits of their teaching by creating the sort of stimulating but emotionally secure classroom environment that enables children to grow—into reading, writing, mathematics, and all the other skills that develop through socialization.

I envision this kind of early education as both an ideal and a necessity in the years to come. It seems clear to me that the curriculum must be broader than can be achieved through the rote learning of basic skills from approved texts according to a set schedule and with tests at the end of each year. The curriculum must be seen as



all those experiences the child has in school, because the child learns from all of them, whether we will it or not—and what the child learns is not always what we had in mind! The ideal curriculum must be concerned with all the human relationships in the school, with respect for the child and with respect for the values and aims of the school community. It must incorporate aims based on knowledge of the needs of the child, the child's individual style of learning, and the changes occurring in society. It must relate to the environment from which the child comes. And it must be imparted through a dynamic reciprocal relationship between teacher and child that builds on ongoing experiences. Moreover, the assessment of whether it has been effectively taught and learned must be made by teacher, child, and parent together, in a continuous process that allows for review, elaboration, and changes in terms of the child's needs at the time. We can all agree, I think, that society needs schools to help children become independent, to develop control over their impulses, to choose values from the models of excellence presented to them, and to use and develop their individual skills and talents. But as we plan for the next fifty years in education, it seems to me we must steady the weather vane a bit. We can't allow the present rather grim condition of society to convince us that all the schools are good for is to train children for the particular tasks or jobs which currently exist. Our most important task as parents and educators is to look *past* this generation and to raise children who can not only deal with present realities, but also change and adapt to unforeseen ones in the future. In the words of William Hodding Carter, "There are only two lasting bequests we can hope to give our children. One of these is roots; the other, wings." ☐



Dear Cooperating Teacher–

THANK YOU!

Larry Beauchamp,
University of Alberta

Many student teaching experiences are rich and rewarding. This is invariably due to the cooperating teacher's approach to the student teaching experience. Over the past few years, student teachers have been providing me with completions to the stem, "What I appreciated most from my cooperating teacher was" . . . These appreciations were examined, and clusters of similar sentiments were generated. These clusters were then condensed into interpretive statements. It is these statements that form the bulk of the hypothetical letter that follows.

Dear Cooperating Teacher:

I know we were thrust together with little or no attempt to match our interests and personalities. I know you were a crucial factor in the success of my student teaching experience. I know we developed a close working relationship and that the way in which this was done was intentional rather than left to chance. I know this relationship was initially dependent on the expectations we had of each other. You made your expectations quite clear at our first meeting, but I was unable to be very articulate about mine. Now that I have completed my student teaching and have had the opportunity to reflect upon my experience, I am in a better position to verbalize my expectations. In retrospect, you met them all. I want to thank you very much for giving me

— the freedom to choose how I wanted to teach

— the time to observe classes and to become acquainted with the pupils before assuming my teaching duties

— support for my authority

— access to resource materials that you had found useful in order to aid me in planning my own

— information about the students so I knew what to expect from classes and could better understand the reasons for behavior problems

— candidness in expressing your own shortcomings or lack of success with program ideas you had tried

— a feeling of welcome by introducing me to other staff members and helping me to get to know them

— the opportunity to follow up on my own discipline problems

— the choice of how much I wanted you in the room after I had assumed full responsibility for a class

— students' reactions to my teaching that you had taken the time to gather

— a display of your expertise without making me feel incompetent

— confidence in myself

— immediate feedback with constructive criticism and suggestions for improvement

— the opportunity to ask questions and discuss mutual concerns

— a realistic teaching situation or pointing out how a particular student teaching experience differed from the real thing

— the feeling that you were (and still are) available if I needed your help

— an evaluation of my teaching success according to students' responses and not just according to my teaching methods alone.

Once again, thank you for the concern you showed in my professional growth. If all cooperating teachers followed your example, the opportunity for a superior student teaching experience would be greatly enhanced.

Sincerely,

Your Student Teacher

Summary—I hope that the preceding letter will serve a number of functions. It should make cooperating teachers aware of what student teachers appreciate in their working relationships with cooperating teachers. This in turn should assist cooperating teachers in initiating and developing the good working relationship that is so essential to the student teaching experience. It can also serve as a check list for self-evaluation of one's work as a cooperating teacher.

How would you fare if your student teacher sent you a thankyou note? ☐

Profile of a School

Alter-Ed, Caledon

ALTER-ED (short for Alternative Education) is a program offered by the Hamilton Board of Education to students wishing to take academic subjects at the grade 9, 10, and 11 levels. The program opened in April 1982, and occupies four rooms on the second floor of Caledon Secondary School. It began with thirty-five students and three staff members. In February, 1983, the program was enlarged to accommodate fifty students, and a fourth teacher was added.

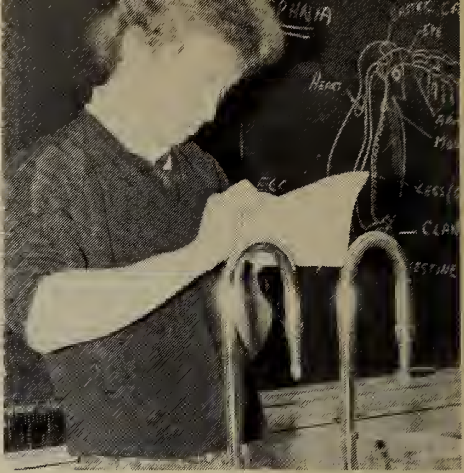
The program is chiefly designed to meet the needs of students who are not experiencing success in the traditional school setting. These students have average ability, but they have become disenchanted with school, sometimes as a result of social and emotional problems, and are unable to make use of the opportunities offered to them. Students who have recently left the school system may also apply. These students have usually wasted opportunities in the past; they would now like to resume their education but do not wish to be in classes with younger students. Some are prepared to work hard in order to earn credits at an accelerated rate.

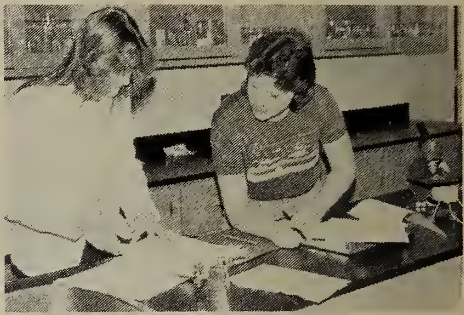
Students are recommended by the secondary school principals. They visit the program and if they decide to apply, they are interviewed by an Admissions Committee composed of the staff, the adjustment counsellor associated with the program, and one member of the Planning Committee responsible for the program. Returning students may apply through the school where they last attended or directly to the Program Leader.

The academic goal of the program is to assist each student to achieve up to two credits each nine-week module. To achieve such a goal, students need assistance in developing the necessary skills and work habits. In addition, they are asked to establish some personal goals, and the staff assists them in developing strategies to reach these goals. The aim is to have students prepare themselves for a return to a composite school (if that is appropriate) or to proceed to further training or employment.

The school year is divided into four nine-week modules. Students meet in subject groups each day. Participation in small group discussions and community meetings is a requirement; otherwise, each student is responsible for planning the use of the remaining time.

Each week, the student's Goals and Evaluation Sheet is reviewed with an advisor. Achievement for the week is discussed, and goals for the next week are established. It is expected that these sheets will also be discussed at home. At the time the student enters the program, he/she and the parents sign a contract stating the commitments which have been made.





As the program embarks on its second year of operation, the staff and the students are constantly examining and evaluating. Changes are being made continuously, and experimentation has become a way of life. In a word, the program is in the process of "becoming."

Second Class Mail Registration Number 4511